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THE INSTITUTIONAL MECHANISMS OF THE CONSTRUCTION SECTOR AND THE ROLES OF THE PARTIES CONCERNED AS APPLIED TO SOCIAL HOUSING

A comparison between France and Italy*

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* The views expressed in this paper are those of the author and do not necessarily reflect the views of the Secretariat of UNIDO. This document is a translation of an unedited original.

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INTRODUCTION

This study of the institutional mechanisms of the construction sector and the role of the actors as applied to social housing has been made as part of the preparatory work for the First Consultation on the Construction Industry to be held in Tunis (Tunisia) from 3 to 7 May 1993. This comparative analysis of the systems in operation in France and Italy highlights their strong points and drawbacks as well as the constraints on and prerequisites for developing a housing policy for the poorest sectors of society. The approach used in performing the study may serve as a basis for researching social housing in other countries.

In his study on the structures and operation of the construction sector, Professor TASSIOS showed the different levels of involvement necessary for setting up an organization in the building industry. His outline clearly shows how close the links are between subsidy policies, regulations, production (carrying out construction projects and manufacturing) and a definition of "the rules of the game" among the actors which takes account of the different phases in the life of the project (in brief, inception, design, construction, maintenance) and also the way in which training and research fit into the pattern.

This document is not intended to cover social accommodation in France and Italy exhaustively, but to illustrate the different levels of involvement in the organization of the construction sector in the particular case of housing. In addition, a comparison of the two countries reveals the different ways of handling identical problems and the variations devised to deal with each country's specific features.

Finally, the study identifies a certain number of key points which may be discussed at the Consultation in Tunis in May 1993.

The information used in preparing this study was largely taken from the book "Housing Construction in France and Italy", which was compiled as part of the Eurorex Programme (see page 9).

I. CONTEXT

A. Geographical, economic and political aspects

	France	Italy
Population	57 million	58 million
Surface area	552,000 km^2	324,000 km^2
Population density (persons per km^2)	103	191
Percentage of people living in towns	74.3 per cent	68.9 per cent
Per capita gross national product (US$)	19,480	16,850
Unemployment rate	10.1 per cent	10.2 per cent
Political system	Republic; President elected by universal suffrage with a seven-year term of office	Republic; President appointed by Parliament with a seven-year term of office
Administrative organization	24 regions 95 departments 36,000 communes	20 regions 95 provinces 8,074 communes

1991 figures.

B. Construction sector

In France

The building and public works sector is the leading sector in the French economy. Its production is equivalent to the production of cars, electrical equipment and domestic electrical appliances all put together. As the time driving force in the French economy, this sector resorts to few imports and by the same token its operations abroad account for a fair amount of foreign trade. The sector has been on a slight downtrend since 1989.

In Italy

The Italian construction sector is the third largest in Europe after Germany and France. As in France, activity has been declining since 1989.

	France	Italy
Building and public works turnover (US$ thousand million)	121	110
Percentage accounted for by building in the building and public works turnover	57 per cent	78 per cent
Economic ranking of the sector in Europe	2nd place	3rd place
Enterprises (in thousands)	311	495
Persons employed in building and public works (in thousands)	1,600	1,859

1990 figures.

C. Construction other than housing

In France

In 1990, construction other than housing in France accounted for 63 per cent of the building activity measured in completed square metres. Following a boom period between 1985 and 1990, office construction slacked off considerably in 1991, and this trend seems to be continuing at present. Socio-cultural amenities and schools are fairing quite well, since decentralization has promoted the building of amenities in local communities. Furthermore, many towns have been developing urban improvement projects, as reflected by the fact that politicians have recently become aware of issues surrounding the quality of life. In addition, the construction market for this decade will be university facilities, since almost two million square metres are scheduled for completion.

In Italy

In 1990, in terms of volume (m^3) the non-housing construction sector in Italy accounted for 53.8 per cent of applications for building permits. There has been steady growth in this sector since 1988. This dynamic movement appears to be basically due to the industrial modernization efforts of the north of Italy to the development of the tertiary sector throughout the country.

D. The accommodation market

In France

In France, the building and completion of new dwellings has been on the decrease for the last 10 years (550,000 in 1975 as opposed to 260,000 in 1990). Currently only half as many blocks of flats are being built as in 1973 and the number of home owners continues to increase. Home improvements now

account for a large proportion of building activity, since the percentage of older buildings is high (90 per cent were built before 1981) and the State is promoting energy conservation, thereby encouraging people to have insulation installed. Finally, the problems of building in town centres (the high cost of land, town-planning restrictions) have led to construction activity founded on restoration work. In France the right to housing is a fundamental right. The Law lays down that guaranteeing the right to housing is a duty involving solidarity for the whole nation. With this in mind, the authorities have introduced various schemes to house disadvantaged persons, for example, by setting up a mutual aid fund in each Department or by granting tax relief on land revenue to landlords who rent out their property to people living on a low income.

In Italy

As in most European Community countries, Italy has also been experiencing a decrease in housing construction over the last 10 years. Here too there has been a shift towards renovations and maintenance, which account for 46 per cent of investment in the housing sector. In 1990, 287,000 dwellings were built in Italy, 25 per cent being detached houses (although this is not the whole picture, since 34 per cent of the blocks of flats are small-scale blocks containing between three and 15 dwellings). Energy conservation policies have taken the form of rather restrictive regulations and subsidies for heat insulation work. There is a lot of talk about so-called "Abusivismo", which refers to the approximately 50,000 dwellings a year built totally illegally (without building permits). Given these high figures, the authorities have been forced to legalize any of these buildings put up before 1986. In addition, since Italian law prevents rent increases, accommodation is no longer thought of as an asset and landlords prefer to leave their property empty with a view to selling it. This has led to an extensive housing crisis in Italy, especially within the context of the economic difficulties faced by all European Community countries.

	France	Italy
Proportion of construction other than for housing	63 per cent of building activity in m^2	53.8 per cent of applications for building permits
Total dwellings in millions of units	26	24
Dwellings per thousand inhabitants	463	417
Annual production (in thousands)	309	287
Detached houses	52 per cent	25 per cent
Proportion of people owning their own home	54.3 per cent in 1988	73 per cent
Average living area	87.3 m^2	90 m^2

1990 figures.

E. Social housing

In France

The low-rent housing organizations play therefore a leading role in urban policies and are an integral part of the French housing market.

The 1,000 such organizations manage a reserve of more than 3 million social rented dwellings, accounting for 46 per cent of the total number of dwellings for rental. They are also involved in the home ownership sector, financing or building homes intended for sale with the help of an assisted loan. They build approximately 80,000 homes a year and renovate a further 150,000. Twenty-five per cent of the rental programmes and 70 per cent of the home ownership programmes involve detached houses. In order to have access to the housing finance, the organizations are obliged to adhere to the minimum legal surface areas, which average 62 m^2 in the case of rented blocks of flats and 77 m^2 in the case of detached rental houses. The homes for sale are considerably larger.

In Italy

The State, the local authorities and the IACPs (Autonomous Institutes for Social Housing) are responsible for low-cost dwellings. However, with 78 per cent of social housing belonging to them directly, the IACPs, which are comparable to the low-rent housing organizations in France, dominate social housing in Italy. Whereas the low-rent housing organizations in France are financially stable, the IACPs suffer serious financial difficulties largely due to the very low rents which slow down construction and renovation and give rise to serious maintenance problems. Furthermore, the virtual disappearance of the private rented sector affects the public domaine, which, despite its limited facilities, is supposed to rehouse the homeless. In this way, nearly 80 per cent of the homes built are used for rehousing private sector "refugees". The IACPs are hardly ever involved in property for sale, as this role is played by the cooperative movements which build approximately 40,000 homes per year. Social dwellings are also offered for sale by construction companies.

	France	Italy
Public sector client*	Low-rent housing organizations	The State, local authorities, IACPs
Reserve of social housing (in millions of units)	3.2	1.2
Percentage of total rented accommodation	46 per cent	19.7 per cent

* The French term "maître d'ouvrage" refers to the person initiating the project, financing the operation and issuing the invitation to tender, in other words the client.

	France	Italy
Annual production (in thousands)	80	15
Annual renovation and maintenance (in thousands)	150	25
Average surface area of a four-room flat (five to six persons) 77	85	
Average monthly rent	1,089 F	450 F

1990 figures.

II. FINANCING OF HOUSING

A. Institutions providing finance

In France

The institutions providing loans fall into four categories:

- The "Caisse des dépôts et consignations" (Deposit and Consignment Fund), which is a government body specializing in funding the low-rent housing sector;
- The "Crédit foncier de France" (French Building Society), which is a government-controlled body basically dealing with families buying their own home;
- State-owned and private banks and finance companies specializing in this sector to varying degrees (officially agreed loans, freely negotiated loans);
- Savings banks and provident funds.

In Italy

There are two types of bodies providing finance:

- The building societies (21 of them);
- The credit institutions in the forms of banks and savings banks.

Building societies are financial bodies in which the State has the major holding. They specialize in medium- and long-term loans for financing building and buying property.

In theory, the other establishments are supposed to handle short-term transactions only.

B. Types of financing

In France

Financing for housing basically takes the following forms: building grants, personal grants, company taxes, tax incentives and mortgages

1. Building grants

Total expenditure on building grants, which are entirely funded by the State, amounted to 19.6 billion francs in 1990. There are three types of grants:

(a) Grants for social rented housing

Grants for social rented housing are intended to help the low-rent housing organizations and mixed investment companies to finance the purchase of land, the building of homes and the purchase of dwellings for renovation. This aid is granted in two forms: assisted loans for the building of accommodation for rental and premiums for improving housing.

In 1990, grants for social rented housing enabled 75,000 new dwellings to be built and 200,000 low-rent homes to be renovated. In 1992, the lending rate for social accommodation was 5.8 per cent over a period of 30 years.

Note: (i) The houses financed by these grants are subject to legal obligations, for example price regulations, living standards, availability of resources for tenants and fixed rents.

(b) Grants for home ownership

Assisted loans for home ownership are intended to finance the building operations and purchase transactions for families with a low income. The lending rate is currently 8.9 per cent for a loan over 20 years.

(c) Grants for home improvements

Premiums may be granted both to owner-occupiers or to lessors undertaking improvement work on their dwelling.

2. Grants paid to individuals

Benefits paid to individuals are funded by the various social welfare schemes, by a share of company taxes and also from the State budget. These benefits (which are means-tested and take into account the number of dependants and location) are granted to tenants or to persons paying back a loan on their main residence in the case of home ownership or home improvements.

In 1990, the total budgetary expenditure on grants paid to individuals amounted to 20.9 billion francs.

3. Company taxes

Private companies employing more than 10 persons are obliged to pay contribute to housing investment activities. In 1992, this so-called

"one per cent" contribution amounted to 0.45 per cent of the total staff emoluments. The companies usually pay the contributions to collecting organizations which grant loans to employees and invest in social accommodation programmes in which flats are reserved for the companies' employees.

4. Tax incentives

A number of housing-related tax incentives have been introduced, not only for those buying their main residence with a loan, but also for landlords who undertake improvement work and for persons investing in rented accommodation. Furthermore, social housing clients are exempted from land tax on the premises they have built during the first 15 years of use. In addition, the majority of housing-related savings accounts are exempted from tax on the interest.

5. Other loans

There are other housing loans which do not qualify for direct government grants, but are governed by regulations and offer attractive terms for those taking them out (rates of between four and six per cent).

In Italy

State intervention in the building of low-cost housing basically involves two types of financing: subsidies and bank loans with interest rate subsidies.

1. Subsidized housing

The low-cost rented housing sector is totally subsidized by the State and geared towards the most disadvantaged persons. These dwellings are built and managed by the IACPs (social housing organizations). The subsidies are funded largely from salary deductions and are granted to local authorities and IACPs for building homes, purchasing premises for renovation and improving existing rented accommodation.

2. Assisted housing

Assisted housing intended for rental or for sale is financed with bank loans with interest rate subsidies for a term of 15 years, with the State making up the difference between the rate paid by the recipient and the reference rate. These loans are most often granted to cooperatives or construction companies involved in providing housing for sale to low-income families. Regional authorities are also entitled to grant loans with interest rate subsidies to private individuals satisfying the income criteria for the purpose of building or upgrading their main residence.

In addition, loans with interest rate subsidies may also be granted for improvements to the communal parts of buildings to individual landlords on a joint-ownership basis or to cooperatives.

The interest rates are between three and 10 per cent, depending on the terms of the loan and the income bracket.

Since February 1992, regional authorities have been legally entitled to allocate part of the assisted financing to erecting rented housing which the tenants are subsequently entitled to buy. These projects are handled by the IACPs, local authorities, cooperatives and construction companies.

Note: (i) Subsidized or assisted housing must comply with regulations on maximum and minimum legal surface area and stay within the upper price limit. In addition, end recipients must satisfy the required conditions in respect of their income.

(ii) Housing programmes qualifying for State funds are located in areas earmarked for social housing on the land utilization plan, and on land which could be sold or put under a building lease.

3. Funds for buying and developing land

Credit for buying and developing land comes from a revolving fund which is financed with the incoming money from financing previously granted for this purpose. These are 10-year interest-free loans granted to local authorities for buying and developing land earmarked for low-cost housing and for buying built-on land which is to be upgraded.

5. Tax incentives

In certain circumstances, there are a number of incentives in respect of housing, such as exemption from building permit fees, exemption from land tax for 15 years, VAT reductions, registration rate reductions and tax-deductible interest on loans.

6. Other loans

The loans granted by banking or credit institutions may cover 50 to 75 per cent of the cost of the dwelling, with a duration of between five and 15 years, at a fixed or variable rate. Currently, the bank interest rate is approximately 14 per cent. The State does not have a clear policy encouraging households to save, but banks sometimes make financial offers of this type.

III. RESEARCH AND EXPERIMENTATION

In France

In France it is the Ministry for Equipment and Housing which distributes the bulk of the public financing for research into building. Its 1991 budget amounted to 438 million francs, which was split between "institutional" research carried out by bodies under its supervision and "incentive" research promoted by the PCA (Construction and Architectural Plan) and also the Urban Plan. The former is an interministerial type of body whose job it is to promote research and innovation in the domaine of accommodation and, more generally, in construction. It promotes life-size research involving all the parties concerned (researchers, designers, craftsmen, enterprises, manufacturers, clients and communal authorities, trade unions and residents). The PCA is responsible for the Eurorex Programme aimed at promoting cooperation between researchers and French and European professionals in the

search for more suitable methods and techniques. It is under this programme that the comparative aspects of practices in the French and Italian construction sectors referred to in this study have been brought to light.

The PCA also deals with the following subjects on an ongoing basis:

- Socio-economic aspects of the residential environment;
- Employment, qualifications, training;
- New products and materials.

Some of the research is also undertaken at educational establishments such as the National Bridges and Highways College, the National Public Works College and the architectural colleges and laboratories for architectural and technical research. In the private sector, considerable work in this area is done by the vocational and technical centres, which are often financed by an additional levy on production and maintain close links with the building trade. They undertake specific research projects under contract and work alongside government research establishments in formulating technical and standards documentation, and in promotional activities and quality control.

In Italy

There are three research structures:

- The CER (National Research Board), which is State-run and basically funds the practical research at universities and its own institutes;
- The Ministry for the Scientific and Technological Research University, which works together with the CER, among others, in launching and coordinating national research programmes aimed at developing highly innovative technology. The Ministry also finances basic and applied research at schools of architecture and engineering;
- The Committee on Living Conditions, which comes under the Ministry of Public Works and is in charge of the planning and supervision of low-cost housing projects, has initiated a series of housing-related research programmes with emphasis on on-site research, procedures and quality. The main aims of these programmes are:
  - Improving quality (quality of life and comfort);
  - Keeping costs down and maintenance;
  - Improving productivity;
  - Technological innovation;
  - Energy management.

IV. TECHNICAL REGULATIONS

A. Comparison

In France

The French regulations are strictly national. The rules for implementing and calculating the construction work are laid down in the DTUs (Standard Technical Documents) and are known as DTU "standards". These DTUs are not legislative texts, but are sometimes mandatory, for example in the case of public contracts. They inform various branches of the building industry on the specifications which must be complied with, the choice and use of materials as well as certain standard calculations for the purpose of designing works in accordance with the conditions under which they will be used.

In Italy

In Italy, in addition to national technical regulations, there are also regional and sometimes local ones. The standards set by UNI (National Standardization Office) only serve as recommendations and are not binding until they appear in market contracts or in the engineer's job specification. In both countries building regulations are basically aimed at the safety and quality of life of individuals, and cover the following areas:

- Stability of the structure;
- Protection against earthquakes;
- Fire protection;
- Ventilation;
- Acoustics;
- Heat production and utilization (cutting down on energy consumption and insulation).

The differences between the regulations in the two countries obviously affect the projects. Whether it be fire regulations, access by the disabled, or surface area standards as applied to social housing, the designer will have to take all the regulations into account when translating the programme into architectural reality.

B. European context

The 1986 Single European Act extended the Treaty of Rome in order to create a single European market on 31 December 1992, as a vast space without internal borders allowing the free movement of goods, persons, services and capital. One of the new mechanisms is known as the "new approach". This is not intended to harmonize all technical regulations, since such a move would be liable to create obstacles to the achievement of a single market, but to use European directives ("framework laws") to lay down limits and a general outline for technical regulations.

For construction using the materials and industrial products qualifying for free movement within the single market, the following conditions and mechanisms apply:

- The six basic requirements which building work must satisfy are:
  - Mechanical resistance, stability of the constructions and their components;
  - Safety in the event of fire;
  - Health, sanitation and environmental standards;
  - Safe when used;
  - Anti-noise protection;
  - Energy saving and heat insulation.
- The Harmonized Technical Specifications regarding the characteristics and performance which the materials and products used must show if the construction is to satisfy basic requirements. The specifications set out the required properties by type of product and by new product. These harmonized technical specifications must be complied with when marketing products falling within the scope of the Directive.

The future European standards will have a profound effect on the national building regulations of the Community countries. However, **Standardization** should not be confused with **Legislation**, and it should not be forgotten that even if a large portion of the standardization becomes Community legislation, it is still the member States' prerogative to set the minimum technical safety level in respect of each basic requirement.

V. THE PARTIES INVOLVED IN CONSTRUCTION AND THEIR RESPECTIVE ROLES

A. The client (maître d'ouvrage)*

1. The social sector

In France

The low-rent housing organizations are the chief means by which housing policy is implemented in France and count among the most autonomous such organizations to be found in Europe. The social client (maître d'ouvrage)* formulates the programme, carries out the operations, assigns accommodation and fixes rents. The activities of these organizations are diversified, since they are also involved as property developers, builders and managers of houses as well as buying up and upgrading old buildings and constructing facilities for social tourism. They are responsible for a third of all building activity each year and nearly 13 million people live in dwellings put up with their assistance. All these organizations are non-profit-making. Although they have genuine autonomy, the whole of the social housing sector is subject to administrative and financial supervision which is both strict and complicated. Each organization of this type forms part of a federation, which

in turn comes under UNFOLHM (National Union of Federations of Low-rent Housing Organizations).

In Italy

(a) Public operators

In Italy social housing is mainly the responsibility of the 106 IACPs (Autonomous Institutes for Social Housing), which are non-profit-making bodies governed by public law. The stock of social housing in Italy covers 1.2 million housing units (800,000 of which belong to the IACPs). This represents 19.7 per cent of all rented accommodation and approximately 6 per cent of all accommodation, which puts Italy at the bottom of the European Community ladder in this respect. The IACPs manage and renovate their own dwellings, but also housing owned by the State and local authorities (communes) in a capacity of delegated clients.

(b) Private operators

In the case of the lower and middle classes, the building of homes (mostly for private ownership) is handled by housing cooperatives and construction companies which carry out projects with assisted financing (see page 6). Cooperatives build between 30,000 and 40,000 homes per year and may be active in the areas set aside for low-cost housing. These homes may also be intended for a special type of rental known as "joint ownership", which guarantees that the partners are entitled to unlimited use of the dwellings.

2. Non-social private sector

In France

In 1991 nearly 60 per cent of homes were built by private clients. They fall into three broad categories: individuals, specialist companies and institutional investors.

- Private individuals account for 50 per cent of housing production each year, and 90 per cent of this involves detached houses.

- Companies specializing in construction account for about 15 per cent of housing production, three quarters of which represents blocks of flats.

- Institutional investors, such as insurance companies and banks, account for about one per cent of the new construction, mostly in the rented sector and in city centres.

In Italy

In Italy the private sector is responsible for more than 90 per cent of housing construction. Here, too there are three categories:

- Private individuals who account for 50 per cent of dwellings built, which are mainly detached houses. The majority of them receive no public aid;

- Developers who account for 30 per cent of new houses built, mainly for private ownership;

- Institutional investors, such as insurance and provident companies, which are required by law to invest in housing for rental.

B. Building project management (design and on-site supervision)

In France

In France the profession of an architect is legally defined as involving "architectural creation and quality of construction in the public interest". There is a professional body which is responsible for accepting new architects into its ranks and imposes a code of professional ethics upon its members. Since 1977 it has been compulsory under the regulations governing building permits to use the services of an architect for any construction project involving a surface area equal to or greater than 170 m^2, and 800 m^2 in the case of farm buildings. The number of architects or persons qualified to work as architects enrolled in the professional body is 26,000.

In Italy

Italian regulations require the services of a designer for any construction or architectural modification, whether inside or outside (the technical service of the municipality must be informed of all modifications, but a building permit is only needed for modifications affecting the structure or façade). The designer may be an architect, an engineer or a land surveyor, although land surveyors may deal with small buildings only (fewer than two floors made of reinforced concrete and not in seismic zones). Licence applications must be countersigned by a member of one of these three professions who is duly registered in the respective professional body. The number of designers totals 157,000 persons (52,000 architects, 20,000 engineers and 85,000 land surveyors).

1. Tasks and fees

In France

The role of the project manager (maître d'oeuvre) is defined by the Law governing Public Works Management (MOP). The architect's services have been split into 12 standard engineering tasks defining the content of each stage. Normally the architect is entrusted with the design and on-site supervision. The choice of architect is open. In the case of public contracts, larger-scale projects require the architect to be selected on the basis of a competition in accordance with the Public Contracts Code. Architects for Public Contracts are paid according to the scale of fees laid down by the Public Contracts Code, whereas in the case of private projects these fees may be freely negotiated.

In Italy

In addition to the traditional tasks which are the same as those carried out by their French counterparts, Italian architects may also take on the job of calculating reinforced concrete structures and carrying out inspection. It is common for the designer and the building supervisor to be two different

people professionally. In Italy fees are calculated in the same way as in France. Private sector contracts may be freely negotiated, although there is a recommended standard contract setting out the minimum mandatory fees for the profession.

2. Duties and responsibilities

In France

In France the two indispensable conditions for practising as an architect are to have insurance and to be a member of the professional body. Architects are legally liable for any work they undertake, including mere consultation. They remain liable for 10 years for any flaws or latent defects affecting the soundness of the building. In addition, they are subject to third-party liability for any accidents or damage that they are deemed responsible for. Insurance in respect of construction is mandatory and the professional body is particularly keen to ensure that the law is complied with.

In Italy

In Italy it is the building contractor and the building work supervisor together who have main liability vis-à-vis the client, if there are proven flaws or defects in construction. The designers are usually the contract holders of an "intellectual services" contract, which means that they are only liable for damage due to criminal deception or serious negligence on their part. In Italy none of the existing professional insurance policies for building contractors and architects in Italy are mandatory.

3. Other parties involved in the project management

In both France and Italy designers are often part of multidisciplinary teams working on the projects with the aid of design and consultancy bureaux specializing in such fields are structures, electricity, fluids and acoustics.

C. Construction companies

1. General introduction

In France

Construction companies tend to be either very small-scale businesses or extremely large concerns (there are 16 companies employing more than 2,000 persons), whereas there are virtually no medium-size companies. In 1990, there were 311 French companies with building as their main line of business, employing 1.3 million persons. Seven of the companies are among the 20 leading building concerns in Europe, with Bouygues being the number one. However, the vast majority of building and public works companies employ fewer than 10 persons. They make up 94 per cent of all construction companies, but account for only 47 per cent of the turnover. Seventy-six per cent of the building and public works companies' activities involve construction, mostly in the housing sector. The profession of building contractor is highly structured. The National Building Federation brings together virtually all the entities involved, or 304,000 companies, and the Confederation of Artisans and Small Building Companies (CAPEB) is the main professional body for the

handicrafts sector (handicraft companies means those employing fewer than 10 persons). Seventy per cent of the work carried out by craftsmen and small-scale building companies is renovation work.

In Italy

In Italy building companies are rather scattered. In 1990 there were 495,000 of them employing 1.9 million persons. Small- and medium-scale companies employing up to 20 persons account for more than 90 per cent of the total turnover. These companies are principally involved in the construction of housing and non-structural work. By contrast, the companies with a staff of above average size are involved in the public works sector and in non-housing construction.

There are three types of companies:

- Private companies for which the most representative association is ANCE (National Association of Building Companies);

- Public sector companies, of which the largest is IRITECNA occupying tenth place in the ranking of European business groups;

- Cooperatives.

2. Liability and insurance

In both countries the construction company is subject to a 10-year period of liability in respect of the client or subsequent owners for any "serious defects".

In France there is also the two-year guarantee in respect of any faults causing the component parts to malfunction.

In Italy, there is a virtual two-year guarantee for flaws not counted as "serious defects". In Italy there is no compulsory insurance for the client, the builders, the architects or the project managers, whereas in France there is mandatory insurance for construction work.

D. Manufacturers

Despite their large economic and structural role, manufacturers have for a long time been relegated to the status of mere suppliers both in France and in Italy. However, they are seen more and more as genuine partners and there has been increased cooperation with designers, often right from the stage of design. Manufacturers have realized the creative role played by client specifications in promoting improvements in quality and innovative policies. They have introduced new research and development facilities and in certain cases have set up special production lines even for a small number of components. The pair - architect and manufacturer - has become the catalytic force needed to develop new types of construction by which to achieve an architectural goal in the technically and economically most effective way and thereby to improve the price-quality ratio. By working together they are doing away with the old rules and habits which still all too often force companies to choose products and techniques on strictly price-related grounds.

In France, customer specifications are very much on the increase with clients themselves suggesting products. This also applies in the case of social housing, where the National Association of Social Housing Clients (UNFOHLM) has drawn up its own product catalogue.

E. Technical and administrative supervision

In France

The activities of the technical supervisor are central to the quality of the construction work. In France the technical supervisor's role is defined by law: "The technical supervisor's task is to help prevent the various technical hazards liable to a rise in the course of construction work. He may step in at the request of the client to give his opinion on any problem of a technical nature. His opinion will be particularly concerned with the soundness of the construction and with the individual's safety." Technical supervisors (individuals or corporate bodies) must be accredited by the Ministry of Equipment and Housing. It is the client's responsibility to ensure that the supervisor's observations are acted upon. He is liable in respect of the task assigned to him and for this purpose he must take out compulsory insurance. He is expressly forbidden to undertake activities involving design, project execution or consultancy. He is not allowed to produce drawings or draw up job specifications or calculation sheets. The technical supervisor is involved in all stages of a project right from the design stage.

Apart from cases where technical supervision is compulsory (for example, establishments receiving the public), it is up to the client to evaluate whether he needs the services of a technical supervisor or not, although he will be aware that insurance companies offer reduced premiums for constructions which have undergone technical inspections.

In Italy

In Italy the role of supervisors is laid down by the Civil Code and involves three types of task:

Administrative supervision

The supervisor has a dual technical/administrative role, usually after the building work has been completed. He checks the technical documents, carries out any tests he deems necessary, checks the accounts and establishes how much the client is to pay to the company to settle the balance on all the accounts. The supervisor must also check that the staff insurance obligations have been satisfied and take note of any accidents that took place in the course of operations. The supervisor is called in when the work is a subsidized project or involves assisted financing, whereas in the private sector this type of inspection is optional. The supervisor may be either a registered architect, an engineer or a civil servant. He is selected by the administration financing the project in question.

Stability inspection

This type of inspection concerns the structure of the building and is carried out on all buildings constructed with reinforced concrete, prestressed

concrete, prefabricated concrete or metal structures. The task of the inspector is to check the stability calculations. The inspection is made by an engineer or an architect who has been professionally enrolled for 10 years, regardless of the party responsible for carrying out and managing the project in question.

Utilities inspection

For all buildings, the law requires the utilities (water, electricity, gas, etc.) to be checked to ensure that they comply with standards and function properly. The inspection is carried out by the company itself or by someone suitably qualified, and involves the issue of a certificate confirming that the utilities are up to standard and work smoothly.

VI. HOW A CONSTRUCTION PROJECT IS CONDUCTED

A. Inception of a project

The procedures described below relate specifically to a social housing construction project launched by a public client.

1. Initiating the operation

In France

The inception of a project is where the construction process really begins. It starts with initial ideas on the project and ends when the companies are selected on the submission of the finance dossier. In the case of social housing, the initiation of the operation is 80 per cent due to the communal authorities who act through the intermediary of the social housing organizations and under programmes targeted at the most disadvantaged sections of society. This system allows local authorities to take global decisions and to put social development and integration activities into effect. These programmes take the form of agreements between the State and the local authorities setting out priorities and defining local social housing policy. An example of this would be to put down a neighbourhood under the neighbourhood development scheme; this involves, under a three-year contract between the State and the region, implementing a renovation programme which incorporates building schemes and welfare activities.

In Italy

It is the regional authorities who are responsible for initiating operations. On the basis of the budget allocated to them and generally in agreement with the communes and the social housing clients, the regional authorities draw up social housing programmes in the light of needs and assign their priorities: renovation, new buildings, purchase of land for low-cost housing, or "integrated programmes" (on the initiative of a commune or a private client, these are projects covering several objectives such as combination of public and private funding, coordinated building of housing and amenities or merging of renovation with new building). At the time of setting out its programme defining the site of the project, the regional authorities also specify the budget and the number of dwellings.

2. Feasibility studies

In France

The main elements of a feasibility study are: the town planning certificate which confirms that the land may be built on, an analysis of needs, market research, budget estimates for operations, cost estimates (land, planning, taxes and levies, building costs, fees, insurance etc.). On the basis of this study the client defines the objectives and gives an opinion on the launching of the operation. The public client may in fact reject a project, if it does not prove feasible, particularly on economic grounds.

In Italy

The social housing organizations have their budget before the operation is launched. The feasibility studies involve, in their case, locating the land earmarked by the commune, and assessing how many dwellings are needed. This stage is concluded by the client and the commune signing an agreement which specifies the price of the land and its installations. The IACP technical services then carry out a series of studies on the characteristics of the ground and on any town planning or other restictions. They then draw up a draft programme and a financial estimate on the basis of which the cost of the project can be compared with the reference price which all subsidized programmes must adhere to. It is very rare for a social housing organization to decline a project allocated to it and it will take all necessary steps to ensure the feasibility of the operation.

3. Management of land

In France

The land is bought at market prices. In the case of projects put forward by a commune, land often comes under a building lease which means that it is virtually free of charge.

Communes may designate "concessional development zones" in order to prevent land prices from rising and "land intervention zones" with a right of pre-emption on any property offered for sale whether built or not.

In Italy

In general, land for building social housing is set aside in the commune land utilization plan under "social housing programmes". If a compulsory purchase procedure has to be initiated, the price currently applied is the market price, since the law which allowed towns to buy back land at agricultural land prices was declared to be unconstitutional. This curb on available land obviously affected the building of social housing. Land is leased to the social housing organizations with a 99-year building lease. Communes have access to funds for purchasing land so as to build up a land reserve intended for social housing.

4. Regulations

In France

All the town planning restrictions are contained in the town planning code. The main regulations governing town planning are:

- The guidelines on property development and town planning (SDAU);
- The land utilization plan (POS);
- The local facilities charge;
- The legal ceiling on building density.

Town planning schemes take the form of guidelines and land utilization plans. All towns of more than 10,000 inhabitants must have the guideline on property development and town planning which is a general policy document. The details are worked out using the land utilization plan. Any commune with an SDAU is obliged to draw up a land utilization plan, which is a key element in local town planning. Among other things, the plan covers:

- The protection of natural areas;
- The organization of the location of and access to the constructions;
- The provision of sites for facilities.

The land utilization plan includes the plot ratio (COS) which is a unit of measurement of the density of construction (for example, a ratio of two over an area of 3,000 m^2 means that no more than 6,000 m^2 of floor area may be built beyond the building). The plot ratio varies according to the intended use of the construction.

The town planning code contains three taxes:

- A charge for exceeding the legal density ceiling, which is set at three for Paris;
- The excess density charge, if the plot ratio is exceeded;
- The local facilities charge which the municipality charges persons applying for building permits. It is used to finance the facilities needed for town planning.

In Italy

The characteristic feature of the Italian system of regulations is the attempt to balance central power and regional authority and the very sharp contractual division between public and private works.

The State lays down guidelines for town planning and social housing, which are then adapted regionally. On the basis of the regional directives, the communes undertake the drawing up of town planning schemes and their implementation. Furthermore, each one draws up its own building regulations incorporating the minimum requirements stipulated by the State.

Town planning is controlled in two ways:

- By the global development plan which is a broad outline for developing the commune; and

- By the detailed development plans which, on the basis of the global development plan, specify fairly exactly the density and the land which may be built on, the types of buildings, the infrastructure etc. The requirements may relate to visual aspects, the look of the façades and sometimes even the materials to be used.

5. The programme

In France

After establishing the feasibility of the project, it is up to the client to devise a programme for it. The programme must set out both the quantitative and the qualitative aims to be achieved, as well as all the special features of the project. A clear and precise programme is likely to make for a more efficient working relationship with the project manager.

In Italy

The programme is effectively the launching of the project. Once the project has been approved, the region provides three per cent of the allocated appropriations and the client then has 10 months to see that the work is started. The programme consists of outline proposals and a technical and economic specification of the project.

6. The relationship between the client, the project manager and the construction companies

In France

The process of construction involves three parties: the client, the project manager and the construction companies. The latter two are linked contractually and separately to the client. In the majority of projects, there is no contractual link between the project manager and the construction companies.

In Italy

The IACPs are unusual in having integrated technical services. The IACPs are expected to arrange for the design and to decide how the companies are to be selected. Depending on the procedure chosen, a certain amount of work connected with the design will be transferred to the company.

7. Reference price

In France

A social housing project may only be implemented if it costs less than the reference price. This price includes the cost of the land, the price of the building and the fees. The reference price is set by ministerial order according to the type of operation (new building, purchase, improvement etc.),

the type of building (block of flats or detached house) and the type of dwelling. It also sets the limit for the costing of the project and the basis for State subsidies and the preferential rate loan (see Financing of Housing).

In Italy

The upper price limit is fixed by Decree from the Minister for Public Works. The Decree is implemented by the regional authorities, although they reserve the right to adapt it to local circumstances. The Decree sets the maximum price for a subsidized housing project and the credit limit for assisted housing. This price varies according to whether the project involves new construction, renovation or exceptional maintenance work. The ceiling price also defines certain specifications for social housing, such as the area of car parks and the proportion of living area to non-living area (cellar space, passageways, entrances, etc.).

8. Structure of project costs

In France

The houses built by social housing organizations are financed:

- By State subsidies (about 12 per cent of the cost of the project);
- By reduced rate loans over 32 years, which cover about 82 per cent;
- By additional inputs (from companies in the form of the one per cent levy or by local authorities) and by their own resources. The costs of a social housing project normally break down as follows:
  - Land charges: 10 to 15 per cent;
  - Building operations: 70 to 80 per cent;
  - Fees and miscellaneous costs: 10 to 13 per cent.

In Italy

The cost of a project breaks down as follows:

- Construction costs: about 67 per cent (20 per cent for the foundations and 46 per cent for the building);
- Additional fees: 33 per cent (technical costs, ground tests, fitting out the site and contingencies).

However, there is no financing programme covering both construction costs and management and maintenance costs. This is implicitly included in the invitation to tender procedure whereby the best technical bid offering the same price is selected.

B. Design

1. Choice of designer

In France

In the case of public contracts, the designer is selected on the basis of a competition. These competitions which are governed by regulations and compulsory in nature, are closely monitored by the interministerial mission on the quality of public works, which sets out the rules and established practices for them. There are three procedures which vary according to the size of the project. In the case of private contacts, the way the contract is awarded depends on the client and competitions are rare.

In Italy

In contrast to existing French regulations on public contracts, in Italy architects are appointed on the basis of a freely-negotiated contract. Architectural competitions are not compulsory, although there are regulations governing them.

2. Design stages

The stages in drawing up a project are in essence very similar in France and Italy. In general, the designer first outlines initial proposals setting forth the layout, dimensions involved and the overall costs on the basis of preliminary sketches. In Italy this preliminary phase takes the form of detailed town-planning schemes. This is followed by a more detailed draft specifying the technical specialists required for the work. Once the building permit is obtained, the designer or a design office produces the working drawings, which include all the diagrams for the project, including the structural and decorative details. A detailed specification stipulates the construction methods and materials to be used. Together with a file containing the technical and administrative conditions, most of the documents at the working drawings stage are included in the pre-contract documents.

3. Building permit

In France

An application for a building permit must be made for any new construction as well as for work carried out on existing structure, when this involves changing the original purpose of the building, or altering the façade on the outside, or the overall size, or adding new stories. Private individuals may apply for a permit for constructions under 178 m^2 in area, whereas for those with a larger area the application must be signed by an architect. On the basis of a detailed preliminary design, the project manager prepares a building permit application which he submits at the town hall on behalf of the client following the standard format stipulated in the town planning code. The time-limit for the application to be examined is three months. If no reply is received within the legal time-limit, permission is deemed to have been granted.

In Italy

Applications for building permits must be submitted for all building or improvement work, except for minor interior jobs in which case the commune merely needs to be informed. The application, which is signed both by the client and the author of the project, is addressed to the mayor and submitted to the municipal office. The reply is given after the application has been examined by the relevant municipal departments and a consultative committee has given its opinion. The examination period is two months and if no reply is forthcoming, permission is deemed to have been refused.

4. Regulations governing the project

In both Italy and France, the project design is linked to a series of restrictions, particularly in the case of low-cost housing. The requirements mostly relate to:

- The surface area of the dwellings;
- Compliance with construction specifications;
- Standards in respect of lighting, acoustics, heating and ventilation;
- Fire protection;
- Disabled access;
- Parking (number of parking spaces to be planned).

C. Choice of techniques

This section* aims to compare French and Italian construction methods used for social housing. It was written on the basis of a sample of experimental projects, which, although significant, does not claim to be exhaustive.

1. Carcass and structure

In France

In most cases the main structural principle applied involves walls and flooring cast on site. This method of construction is very suitable for the network of small- and medium-sized companies which have the appropriate shuttering and hoisting equipment and whose relatively unskilled workforce restricts or rules out the use of techniques or applications entailing risk of poor quality (brick work, for example). This construction technique uses a lot of low added value materials (aggregate plus cement or ready-to-use concrete). On the other hand, it does require sophisticated equipment (table forms, moulds, etc.).

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* Text drawn up on the basis of a study carried out by M. Martin and M. Cochet from the BETREC Project Consultancy Office at the request of the Construction and Architectural Plan under the EUROREX Programme.

Prefabricated products are also used for the same purposes (prefab walls, prefab flooring), although less often since the projects are most often medium sized (an average contract being for fewer than 30 dwellings). As a rule, prefabricated units are only used when dictated by considerations of time or when the architectural requirements need many copies of an item which would be too complex to reproduce reliably on site. In most cases, the financial constraints on social housing rule out prefabricated units.

As a variation of the on-site wall or floor casting, floors are often partially prefabricated with preslabs, which are widely used to avoid shuttering.

In addition, front walls are often made of plaster cement blocks when the load-bearing grid is perpendicular to them.

In Italy

In 90 per cent of the cases observed the general structural principle involves posts and beams in reinforced concrete cast on site with joist and slab floors and vertical brickwork filling. This method of construction is suited to the Italian small- and medium-sized companies with little in the way of hoisting equipment, but a skilled workforce. This method takes more time, but it suits the Italian system of financing social housing, which is based on subsidies rather than loans. There is widespread use of standard types of bricks, slabs and joists.

Although the widespread use of the post and beam system is in part due to economic reasons relating to the companies concerned, distribution network and size of the projects, there is undeniably a significant cultural factor at work too, namely that the Italians prefer houses built of prestige materials such as brick. There was considerable experimentation with the "traditional" system of reinforced concrete posts and beams in the 1960s, which made it possible to combine industrial building using modular components with assemblages of elements.

Furthermore, this system has clearly stood the test of time and makes it possible to use reliable and durable finishing products, such as tiles. In terms of overall cost analysis, taking all trades into consideration, this system is very sound.

Prefabrication is not cost-effective given the size of projects in small- and medium-size towns (10 to 40 dwellings), although certain complete prefabricated systems are used in large-scale projects involving over 100 dwellings. This type of prefabrication basically follows the post and beam system. It combines modular flooring components with prefabricated walls involving an insulating web between two reinforced concrete facings.

Since this system is only used for large-scale projects and in large built-up areas, it is not on the increase and is of negligible significance for social housing.

The system of load-bearing walls and concrete flooring cast on site is not widely practised, except by large business set-ups with large-scale contracts to complete in short time-limits.

2. Framing work and roofing

In France

The framing work in France is quite separate from the carcass work, and basically involves products made of solid timber, glued laminated timber or factory-produced frames made of stapled timber. The commonest method these days is the timber frame which has gradually replaced the traditional system of solid timber trusses.

If the space under the roof is to be used as living space, a system of wall-to-wall purlins is often used, given how common load-bearing shear wall structures are. With this system the shear wall runs along at roof level and supports the purlins.

In Italy

In Italy the commonest method is to use an actual sloping panel: a joist and slab panel running from the eaves purlin to the ridge purlin and the hip rafters. These elements themselves are made of reinforced concrete beams supported by the structural posts.

Timber framing or mixed timber/concrete framing as well as steel framing are, in any case, little used.

The Italian framing work is, therefore, closely linked to the carcass, since it tends to be a continuation of the system of posts and beams and of joist and slab floors of the underlying structure. None the less, it remains the work of the carpenter who also makes on site all the moulds needed for the concrete cast in situ. The term carpenter also covers the work of the French framework setter ("coffreur").

3. External joinery and blinds

In France

There are basically two materials used for external joinery in French social housing: wood and PVC. Older buildings have mostly timber joinery, but there has been a pronounced shift towards PVC which has been replacing timber and costs about the same price. However, wood is still used for projects small enough to be handled by local joinerys, but too small to be of interest to PVC distributors. The use of PVC avoids maintenance problems. In the case of top-of-the-range properties for sale, aluminium is generally used rather than PVC.

A lot of the older houses had metal blinds made of painted steel, but these have gradually been replaced with PVC. Currently PVC window units with built-in rolling shutters are making considerable headway. Very few projects involve side-hung wooden shutters.

In Italy

Four main materials are used in the external joinery of low-cost housing in Italy: wood, steel, PVC and aluminium. Formerly the most common materials used in joinery were painted steel and varnished wood, which have nowadays

given way to products such as PVC and aluminium. This change has come about not only as a result of maintenance problems with wood and condensation problems with steel, but also due to the extensive market success of PVC for economic reasons.

Blinds most frequently take the form of rolling shutters made of a metal alloy or wood, although there is a new trend to opt for PVC rolling shutters as part of an all-in-one window casing unit.

4. Floor finishing

In France

Given how much these finishings cost, nowadays only entrance halls are given hard floors (usually ceramic tiles). In France, a hard floor is a sign of a property's standing. When the overall cost of projects is borne in mind, it tends to show that fitting hard floors, at least in damp rooms, is of benefit to the operator in the long term. Individual dwellings are very rarely tiled. Most commonly the floors in rented accommodation are given a thermo-plastic finishing. In rented accommodation carpets are often laid, especially in bedrooms, and in property for sale this is standard practice.

In Italy

In contrast to France, in Italy all floor finishings, whether they be in rented accommodation or property for sale, are of the hard type (ceramic tiles or terrazzo). Only slight differences in the quality of the products used will distinguish the standing of the property. This is a real Italian tradition found in virtually all building projects. The communal areas usually have a marble, ceramic tile or terrazzo finishing laid over a bed of mortar on a damp proofing course or sand bed. The communal areas are never fitted with soft floors. The skirting is made of marble, or failing this, tiles, and steps on the staircases are often done in marble or terrazzo.

The floors in the individual dwellings are usually covered in single-fired or ceramic tiles or in terazzo. Bedrooms sometimes have wooden floors, but this is a luxury version used by cooperatives when upgrading the buildings.

The kitchens usually have ceramic or marble skirting, whereas wood and plastic are used in the other rooms. Fabric or PVC coverings are rarely employed, since they are unpopular with consumers.

Balconies and patios are often covered in red sandstone or single-fired tiles, which are intended to be decorative. Balconies are rarely left without a finish.

5. Wall finishings

In France

Wall and ceiling finishings are rather varied, as unfortunately is their quality, which may undermine the aim of optimizing overall costs, particularly for the communal areas. However, when it comes to the interiors of the buildings, this variety is a plus point.

Discussions on overall costs are currently under way in order to reassess the quality of the products used on the communal areas and on the areas most prone to wear and tear inside the dwellings (living rooms and halls).

In Italy

Wall and ceiling finishings nearly always take the form of washable paint, which provides considerable durability not only for the communal areas, but also for the individual dwellings. The disadvantage of this is that there is a certain monotony either in the communal areas or inside the dwellings.

D. Consultations with companies

In France

Consultations with companies are mandatory for works over a certain value in the case of public contracts only.

In Italy

The type of contract is determined by the type of client. Public clients responsible for social housing (IACPs) and the communes are obliged to undertake pre-contract negotiations.

(a) Consultation file

In France

Company consultation file refers to regulatory documents which are not attached to the tender, but which all the companies are expected to be familiar with:

- The public contract code;
- The standard specifications of the contract, which take the form of so-called Standard Technical Documents (DTU) for the building. The Standard Technical Documents specify a code of practice for each trade as regards techniques and the use of materials (see technical regulations).

The file includes various written documents and components of the project at the detailed initial design stage, as well as all or some of the working drawings. The client may or may not specify a price limit.

In Italy

Companies submit offers on the basis of a file containing the master specification, a detailed initial design, working drawings (which usually only cover the architectural description, since the structure and the installations are delegated to the company), unit price schedules, and sometimes a quantity survey and detailed specification.

(b) Company's eligibility criteria

In France

In order to be entitled to put in a tender, a company must satisfy certain conditions, in particular:

- References and suitable technical competence;
- Proof that it has the required insurance coverage;
- Not being in receivership;
- Proof that it has complied with its tax and social security obligations.

Companies may be temporarily or permanently excluded for not having handled previous contracts adequately.

There is no official list of companies available to receive a request for quotation, although some guidance may be provided by consulting the authorities' lists which identify and classify companies.

In Italy

For all public contracts over a certain value, the companies must be on the national register of construction companies, which classifies the companies on the basis of the contract size and the type of work. Registration is subject to submission of a file with economic, financial and technical references. In addition, the company is obliged to provide security in the form of a bank guarantee or insurance equivalent to five or 10 per cent of the value of the contract.

(c) Forms of consultation

The publication of invitations to tender is compulsory in both countries, with differences in procedures relating to the value of the contract and the type of consultation. The client must also make it known in the same publications as those used for advertising.

In France

For public clients the company selection procedure is regulated by the public contract code, which specifies three main procedures:

- Public tendering, or a procedure in which the competition entails the price alone;
- Invitation to tender, whereby the contract is awarded to the bid considered "most interesting" in terms of a set of criteria stipulated in the code: price, running costs of the building, technical work, deadlines, and professional and financial guarantees;

- Negotiated contracts, whereby the client freely negotiates the contract with the company which is to carry out the work. This procedure may only be used for very small public contracts and under special circumstances.

In addition, when special research is required for technical, aesthetic or financial reasons, the public client may opt for the so-called design-and-construction competitive tendering procedure, which brings the architect and the company together, since it concerns both the design and the building work. The designer and the company jointly submit a project and their price to the client.

In Italy

For the public client, the financing of the project has already been completed at the time of selection of the companies (the basic price is stated in the call for tenders). There are various forms of pre-contract negotiations:

- The open procedure, which has virtually been abandoned;

- The restricted procedure, whereby the client may preselect the companies to be invited to tender;

- The invitation to bid on the basis of a "guideline project" (a project at the outline proposal stage and a programme setting out all the client's objectives and constraints), which enables companies to be consulted on the design and implementation of the project. It is then up to the company to choose the architect. This procedure is quite common and is used when the project has specific innovative technical requirements. The procedure enables the company to take advantage of know-how, whereas with traditional procedures only the price counts;

- Restricted invitation to tender with price and quality bids, put out on the basis of a specific architectural project, but open with regard to the technical means and choice of materials. This is the most commonly used procedure;

- Invitation to tender plus a competition, similar to the French design-and-construction procedure, whereby the company must put in a bid in conjunction with an architect. Given the lack of interest shown in this by companies, the procedure has been virtually abandoned;

- Negotiated contract used for small amounts of money, emergency cases, for unsuccessful invitations to tender, and for experimental projects;

- In Italy there is also a procedure for awarding construction and management, whereby the contractor is given the management of the project in return for completing the work. This is intended to speed up the construction of public works.

E. The building work

1. Site organization

In both France and Italy, the site organization is the joint responsibility of the company and the design team. The design team coordinates all the activities involved and draws up the detail chart known as the planning schedule. The company organizes the actual building, selects the technical methods and draws up plans. At the same time there must be financial planning to enable the client to establish the amounts of money to be paid to the company while the work is in progress. The company and the project manager draw up a plan for on-site installations, which, among other things, enables them to provide for the required equipment, facilities and health and safety installations. The two main administrative formalities are the site start-up notification and the construction site notice-board indicating the whereabouts of all the parties involved.

2. Health and safety

The client and the project manager are liable to penalties if they do not comply with health and safety regulations. In France, for contracts over a certain value and when there are more than 100 workers at the building site, companies are obliged to draw up a health and safety plan. In Italy, under the anti-Mafia law, the successful bidder is obliged to complete a certain number of formalities. Any work subcontracted must be approved by the authorities. In addition, the company must provide the client with proof that both it and its subcontractors are complying with the social security, insurance funds and safety obligations for their workers. The company must also submit a site safety plan.

The content of the regulations on site safety are closely related to the methods of construction. In Italy the commonest method involves a post and beam structure with slab and joist floors and brick infill. This construction technique does away with any heavy-duty handling or tower cranes or similar equipment, and therefore reduces the number of safety precautions required when using and setting up the site. On the other hand, the post and beam system requires a lot of scaffolding. Another key factor is the deadline for completion. Completion time is longer in Italy, which means that there are fewer men on the site and fewer jobs being done at the same time. These facts have a crucial effect in terms of workstations protecting each other as well as on the size of the installations and risk reduction and therefore safety precautions. In France, the fact that the equipment used on site has become more important than the actual skill of the workforce has made the introduction of stricter regulations necessary. In Italy, builders are still considered to be craftsmen, which explains the differences between the two countries in terms of on-site installations and safety precautions.

F. Maintenance and management of the rented accommodation

1. Allocation of dwellings

In France

In accordance with the construction and housing code, social housing is reserved for people on a low income. The allocation terms depend on the type

of financing of the housing. Applications for dwellings are submitted either to the social housing organizations or to the commune where the housing is situated. The tenants have security of tenure, even if their income or family circumstances change.

In Italy

In Italy there are considerable differences between the regions and each region may fix its own allocation criteria, including the income limits. Different types of family are given priority for different types of housing. Citizens of an EC country are the only ones to have the same entitlements as Italians. The sharing of his responsibilities between allocation, construction and management is a problem area for the client. Because of this it is common for delays in finalizing the waiting list to lead to time lags between the dwellings being approved for habitation and tenants moving in. Permanent tenure is normally guaranteed, but a rental supplement is charged when the income of the household exceeds the ceiling income for eligibility for low-cost housing for two consecutive years.

The French system has the advantage over the Italian system as it provides the organizations with a closer link between the planning of projects and the allocation of the housing, since the funding is directly tied in with the target families. On the other hand, the opportunity to use several sources of finance makes for a more varied social mix.

3. The rents

In France

Fixing the level of rent is a key issue for the public client when planning his activities. Planning is based on the concept of a "balancing rent". The rent is intended to balance the investments (past and present) in the project and also to cover the major repair fund and possibly also the management costs.

Tenants with an income below the ceiling are entitled to a monthly subsidy, which means that the State covers the difference between the tenant's ability to pay and the actual amount of the rent. The cost to the household represents between 10 and 26 per cent of its income depending on the type of housing.

In Italy

Rent plays no decisive role when launching a social housing project. In fact, the criteria for fixing the level of rent have no bearing on balancing the books at all. The level of rent is calculated according to the family's income. The difference between the tenant's solvency and the actual amount of the rent must be covered by the client, which leads to serious management and maintenance problems in the social housing sector. In 1991 the cost to tenants living in IACP housing represented eight per cent of their income, as opposed to 20 per cent in the private sector.

4. Renovation and maintenance

Both French social housing with its 3.3 million units and Italian social housing with its one million units are faced with the problem of adapting this

resource and maintaining it so that it meets tenants' expectations. In this context, renovation plays a key role in both countries.

As in Italy, public clients dealing with social housing in France receive State subsidies to cover renovation, but not for the management and maintenance of social housing.

In France for major repairs involving considerable work, the managerial body sets a certain amount aside each year (at least six per cent of the real estate value of the property).

In Italy, the low rents make maintenance rather difficult and do not suffice for any funds to be set aside for major repairs. The only way to finance exceptional repair work is to sell some of the dwellings.

VII. THE KEY POINTS

1. Carrying out a construction project brings many different parties into play, from the financers, to the client, including the architect, the project consultancy bureau, construction companies and manufacturers and not forgetting the technical supervisor. As the building process gradually becomes more complex and equipment diversifies and becomes more sophisticated, so the number of parties involved also increases. It is crucial to define their respective roles and responsibilities. Lastly, the introduction of technical inspections may well play a decisive role in respect of the quality of construction work.

2. Political will is needed to establish special financing mechanisms and a body of regulations governing social housing (constraints regarding quality, surface area, town planning as well as technical specifications) for the purpose of developing coherent housing programmes for the most disadvantaged segments of society. The regulations may vary according to the type of financing and the type of project (new building or renovation; for rent or for sale).

3. The social rented housing sector and the private ownership sector are complementary. In France, social housing was for a long time exclusively for rental purposes, but owner-occupier programmes have been gradually on the increase. In Italy, both due to the mode of financing and to the structure of the building trade (the role played by cooperatives and construction companies) the social housing sector is particularly dynamic. The public clients concentrate on low-cost rented accommodation, whereas private clients run property for sale programmes.

4. Both in France and Italy, the rented sector has lost the flexibility which 10 or 20 years ago allowed it to fulfil its welfare housing objective. Household mobility, which should be at least 10 per cent per year (in other words one person in 10 moving house every year), has gone down to 3.4 per cent in France and even less in Italy. This situation is almost as static as if the tenants owned their own home.

5. Introducing competition between construction companies leads to cost reduction. Whereas companies were once selected purely on the basis of price, there is an increasing preference for pre-contract negotiations (consultations) that take into account the quality of the services and the "global cost", including maintenance costs for the buildings.

6. The choice of building techniques is normally up to the designer (the architect in France), but the company often contributes its own know-how in responding to invitations to tender and later on when the working documents are drawn up. In addition, clients themselves impose certain choices and demand a certain level of performance and quality.

7. Technical regulations were originally designed to guarantee the safety of the tenants. The regulations are usually based on standards, but they represent in fact an extension of established standards, since the standards were originally a contract document drawn up by all the parties concerned (buyers and sellers of goods and services). This idea has been incorporated into the European directive on the "new approach" to the idea of quality. Standards should be restricted to the characteristic of suitability for use and not be concerned with product description. Standards should specify performance criteria rather than descriptive ones.

8. Building regulations are often extremely important in industrial countries, because they have been drawn up gradually with continual improvements, but they must be such that they can be complied with. Furthermore, it is vital to introduce suitable inspection techniques. It would serve no purpose to specify constraints that are too far from reality and beyond the capabilities of manufacturers, since it would then be out of the question to enforce compliance with such regulations.