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## Improve general contracting to strengthen the effectiveness of the Italian public commissioning bodies in managing of the construction process *Rafforzare la figura del Contraente Generale per aumentare l'efficienza delle Stazioni Appaltanti Italiane nella gestione del processo edilizio*

The EU Directive 93/37 defined the "third kind" of tender procedures, that a public commissioning body may use to select a figure that is responsible for "the realization, by whatever means, of a work corresponding to the requirements specified by the contracting authority."

Italy has interpreted in an original way this tender procedure, introducing (through law 443/2001) the role of "contraente generale".

The point is that the notion of "contraente generale" still remains controversial on the ground of international comparisons, especially in terms of risk allocation between public client and contractor. The paper presents some results of a study on the Italian "contraente generale" scheme, compared with the procurement models as identified by the available international literature.

In conclusion, some recommendations are made for the adaptation of the Italian legislation, allowing to improve its compatibility with the ppp model generally adopted in Europe.

*La Direttiva Europea 93/37 definisce il "terzo tipo" di procedura di affidamento di lavori pubblici (dopo appalto e concessione), che può essere utilizzata da un'amministrazione committente per selezionare un soggetto responsabile della "realizzazione con ogni mezzo di un'opera corrispondente ai requisiti fissati dall'autorità committente".*

*L'Italia ha interpretato in modo originale questa procedura di appalto pubblico, introducendo nell'ordinamento (con la legge 443/2001 "Legge obiettivo la figura del contraente generale.*

*Il punto critico di questo assetto risiede nella nozione di "contraente generale", che rispetto ai riferimenti internazionali a cui può essere correlata appare incerta e controversa, specialmente in termini di ripartizione dei rischi fra committente ed esecutore delle opere.*

*Il Paper presenta alcuni risultati di uno studio della procedura italiana di "contraente generale", confrontandola con i modelli di processo delineati dalla letteratura internazionale sul tema.*

*Dopo una breve analisi delle possibili alternative, gli Autori formulano alcune raccomandazioni proposte per il miglioramento della normativa italiana, che la renda meglio coerente con i principi del ppp (partenariato pubblico-privato) generalmente adottati in Europa e a cui la procedura del contraente generale deve essere correttamente riferita.*

**Keywords:** client; contract law; international comparison; ppp (public-private partnership); procurement; project-construction-management

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The European Directive 93/37 defined the “third kind” of tender procedure, that a public commissioning body may use to select a figure that is responsible for “the realization, by whatever means, of a work corresponding to the requirements specified by the contracting authority.” [1]

Aiming at overcoming its structural lack in infrastructure, Italy has adopted a sort of “fast track” regulation for public works to be applied to tenders over 250 M€ needed for the award of strategic infrastructure and industrial projects identified by the Government on an annual basis. This regulation interpreted in an original way the “third type” of European tender procedure, introducing (through law 443/2001 known as “legge obiettivo”, as integrated by decree 192/2002) the role of “contraente generale”, improperly translated as general contractor.

During the last decade, some modifications have been adopted in the field. The new “Codice dei contratti pubblici” (Code for public tenders) repeals the law 194/1994 and covers also public contracts for services and supplies, as well as concessions and project financing schemes. In addition, the Program for Strategic Infrastructures (PIS) has been progressively extended including a number of new projects [2]. Despite these modifications and the revision of some procedures (mainly through the legislative decree 189/2005), the framework established in 2002 for the “strategic infrastructures” is still substantially confirmed.

Since its adoption, the comments on this new framework has been mostly positive: a brief review of just few advises – as summarized in references [3] to [6] – offers a large array of opinions, lacking however any clear or univocal definition, based on suitable international references, especially in terms of risk allocation between public client and contractor, as discussed in a previous paper by the same authors. [7]

In fact, “general contractor” is the usual and more common translation for the Italian word “contraente generale”, but this apparently obvious correspondence does not help to draw a useful profile of it. As some observers think, “main contractor” better explains that the “realisation by whatever means” implies not only the capacity to deliver all sorts of works but also to coordinate the activities on site of a number of specialized contractors.

The portrait of the Italian “contraente generale” drawn from these different points of view does not yet emerge for the following reasons:

- it is other than a “construction and management concessionaire” [8], despite the fact that:
- its activity can easily bring this figure to the *ppp* definition, as adopted in the Commission paper Com (2004) 327 final (especially considering that the “contraente generale” must partially “pre-finance” a public work), although void of exploitation risk [9], and although:
- it appears to be similar to a fixed-price turnkey contract with the awarding authority, according to a *design, build, finance and transfer (dbft)* scheme [10], even if:
- it refers to an *epc (engineering procurement and construction)* scheme of contract with certain features of its own [4].

In this shaded situation it can be interesting to resort to some basic definitions, trying to establish a general and useful reference framework.

## BUILDING PROCUREMENT SYSTEMS CLASSIFICATION

For the purpose of international comparison, the approach devised by J.C. Perry [11] has been adopted, as it appears most appropriate from the point of view of classification, as suggested by J.W.E. Mastermann in his manual on “building procurement systems”[12], which offers a clear, complete and well documented approach on all different procurement processes, especially focused on the client strategy and on its effort to find the *most appropriate method of managing the design and construction of the project*. Following the classification established by Mastermann and Perry for the purpose of assisting the clients in the selection of the most suitable building procurement system (Fig.1), the possible options are the following:

1. *Separated procurement systems or conventional systems*, where the main elements of the project-implementation process, i.e. design and construction, are the responsibility of separate organisations, e.g. design consultants, quantity surveyors, contractors. The client has all of the members of the project team to deal with and is responsible for the funding and the eventual operation of the facility.
2. *Integrated procurement systems*, where one organisation, usually but not exclusively a contractor, takes responsibility for the design and construction of the project so that, in theory at least, it is the only one with which the client deals. “Design and build”, “develop and construct”, “package deal method” and “turnkey approach” are the main systems in this group. In the latter case the contractor may well provide or arrange funding for the project and be responsible for the subsequent operation of the facility.
3. *Management-orientated procurement systems*, like “management contracting”, “construction management” and “design and manage” where the management of the project is performed by an organisation working with the designer and other consultants to produce the design and manage the physical operations which are carried out by works- or package-contractors. When using such systems the client will need to have a greater involvement with the project than when employing any of the other previously described methods.
4. *Discretionary systems*, where the contracting authority lays down a framework for the overall administration of the project within which it has the discretion to use the most appropriate of all the procurement systems outlined above.

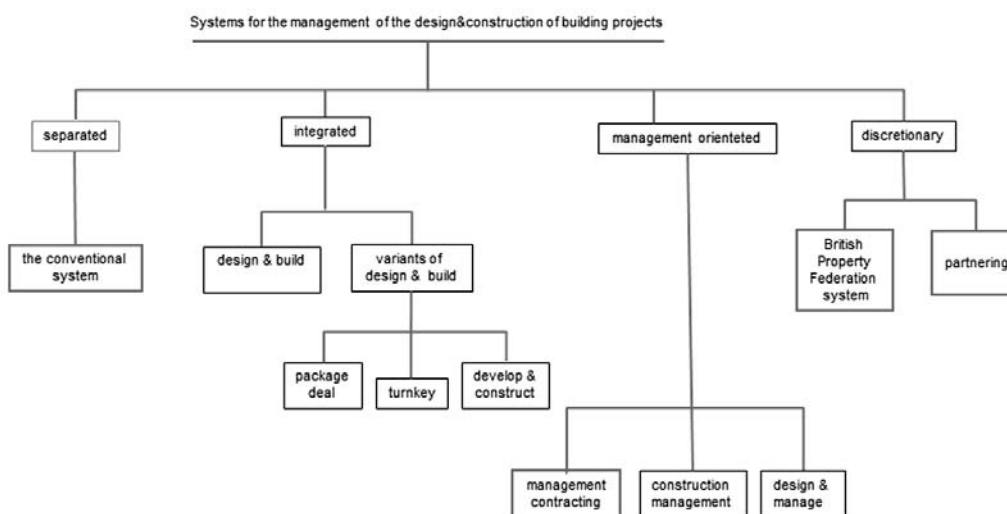


Figure 1. Systems for the management of design & construction of building projects (Mastermann, 2002)

## APPLYING THE CLASSIFICATION TO THE “CONTRAENTE GENERALE”

Two procedures seem to meet the “contraente generale” model closer than other procurement variants: the “Design & Build” scheme (especially in its variant known as “Fixed-price turnkey contract”) and the “Design and Manage” scheme. A deeper analysis allows to demonstrate that for different reasons, both these schemes - as usually adopted in international building procurement - do not meet the profile drawn by the Italian ad-hoc legislation of 2001/02.

Then, in the Italian “contraente generale” scheme remains ambiguous how the legislator has intended to reinforce the client position against the contractor, a goal which is generally achieved establishing means and measures of control during and after the construction phase. Thus resorting to services internationally known as *pcm* (project/construction management).

The most appropriate option is the second, the integrated procurement system, in order to verify how a “contraente generale” can meet the typical requirement of this process. It incorporates all the methods of managing the design and construction of a project where these two basic elements are integrated and become the responsibility of one organisation, usually a contractor. Its main variant, the “design and build” procurement system, the arrangement whereby the contracting organisation takes sole responsibility, normally on a “lump sum fixed price” basis, seems the model that better fits the “contraente generale” profile, although Mastermann suggests that the excellent performances in time and cost of this model depend on the typical “single point responsibility”. This advantage can only be really achieved if performance criteria are used in the formulation of the client’s requirements but unfortunately none of this kind of specifications are clearly stated by the Italian “legge obiettivo”. (Fig.2).

	D&B	Italian CG
contracting organization takes sole responsibility	✓	✓
Lump sum fixed price	✓	✓
Client’s requirements expressed by performance criteria	✓	✗

Figure 2. Comparison between D&B main features and Italian CG scheme

The “turnkey” is the other variant of integrated procurement systems that could be applied to the “contraente generale”. In this case one organisation, generally a contractor, is responsible for the total project from design through to when the key is inserted in the lock, turned and the facility is operational. The responsibility of the contractor can extend to include the installation and commissioning of the client’s equipment and sometimes the identification and purchase of the site, recruitment and training of personnel, arranging of funding for the project and its operation (Fig. 3).

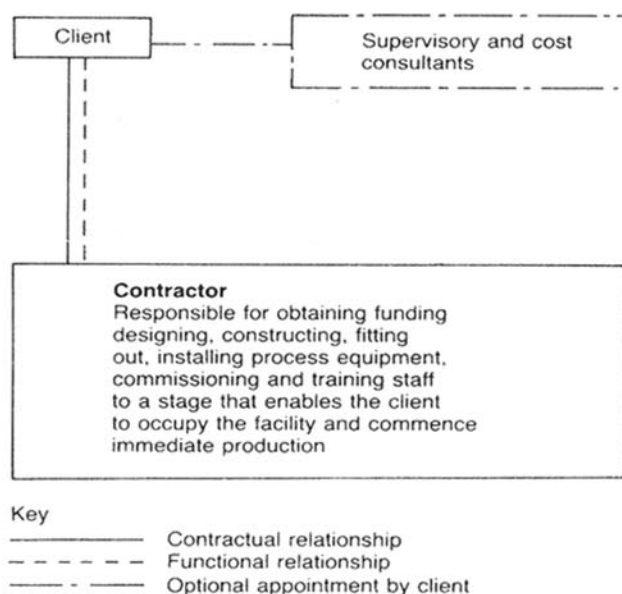


Figure 3. Functional and contractual relationship: the turnkey system (Mastermann., 2002)

Because of the explicit exclusion of operating the facility, the “turnkey” system as usually adopted in international procurement does not meet the profile drawn by the Italian ad-hoc legislation (Fig. 4).

	Turnkey	Italian CG
contractor is responsible for the total project	✓	✓
contractor's responsibility includes the installation and commissioning of client's process or other equipment	✓	✓
contractor's responsibility includes the arranging of funding for the project	✓	✓
contractor's responsibility includes the operation of the project	✓	✗

Figure 4. Comparison between turnkey main features and Italian CG scheme

Another reference could be the third option, the management orientated procurement systems: i.e. processes whereby an organisation, normally construction based, is appointed to the professional team during the initial phases of a process to provide construction management expertise under the direction of a contract administrator. Within this framework the “design and manage” variant seems to meet the “contraente generale” model closer than others. In this procurement system a single organisation is appointed to both design the project and manage the construction operations using package contractors to carry out the actual work. Reimbursement is by means of a lump sum or percentage management fee with the actual cost of the works packages, together with any common services, being paid to the contractor when responsible for the management of the project (Fig. 5).

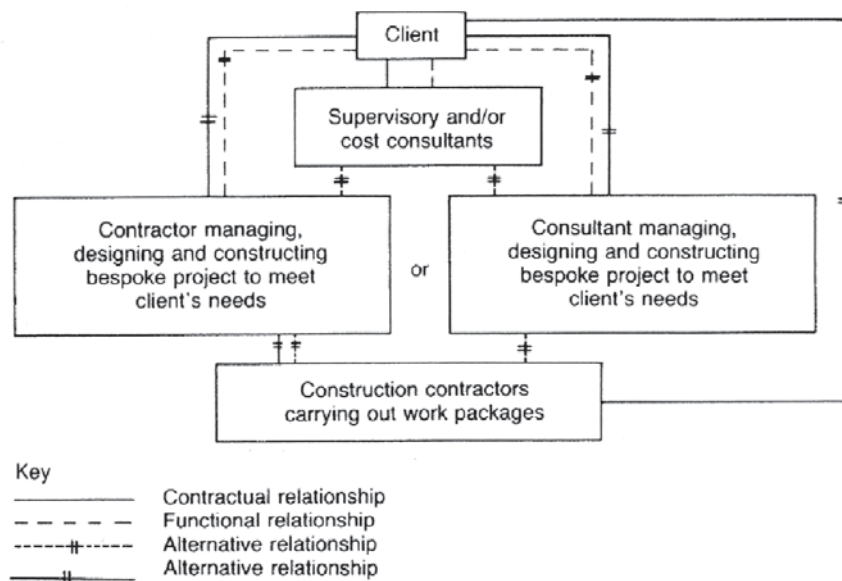


Figure 5. Functional and contractual relationship: design and manage (J.W.E. Mastermann., 2002)

It must be noted that the appointment of an independent quantity surveyor is not envisaged by the Italian scheme, although this activity is considered compulsory by the international reference model. Moreover, in a constructor-led design and manage approach the question of quality control is a vexed one, with the responsibility for this function nominally being allocated to the design and manage contractor but in reality usually devolving upon quality controller, independently appointed by the client (Fig. 6).

How critical the question still remains is showed by a recently published comparative analysis



on twelve ppp cases in Europe in which the key role played by means and measures of control established along the entire process is highlighted [5].

	D&M	Italian CG
a single organization is appointed to both design the project and manage the construction operations using package contractors to carry out the actual work	✓	✓
lump sum fixed price	✓	✓
the client appoints an independent quantity surveyor to oversee the financial aspects of the scheme	✓	○

Figure 6. Comparison between D&M main features and Italian CG scheme

### THE STATE OF THE ART

Eleven years since the law introducing general contractors was first implemented, a total of 37 such subjects are considered active in the national market (out of 45 which can claim the necessary qualifications) but more than 50 were granted this recognition, a few of which have since abandoned the “arena”.

The following Table (Fig. 7) shows the relative importance, next to the traditional construction firms of engineering/contracting firms and of permanent (or, in two cases, cooperative) consortia.

	<i>I level (less than 350 million euros contract)</i>	<i>II level (between 350 and 700 million euros contract)</i>	<i>III level (more than 700 million euros contract)</i>
Construction Firms	7	6	8
Engineerings/Contractings Firms	3	-	5
Permanent (or Cooperative) Consortia	3	3	2
<b>Total = 37 operationals (on 45 qualified)</b>	<b>13</b>	<b>9</b>	<b>15</b>

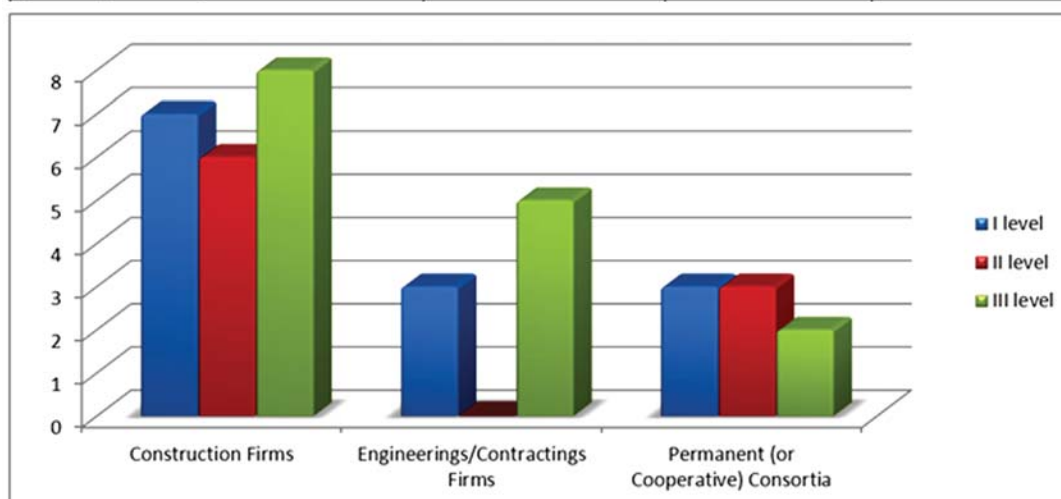


Figure 7. Comparison between D&M main features and Italian CG scheme

## CONCLUSIONS

In Italy the application of the “legge obiettivo” has concerned the award of 24 contracts worth 13,2 billion euros (while two contracts have been cancelled, one of which is the famous Messina Straight Bridge, estimated at 4.4 billion). As of 2012 only 58,5% of the awarded works had been completed and prices had increased by an average of 10%.

No evidence is yet available as to improvements which derive to the procurement/management/construction process.

The traditional procedures have not been accelerated because the variants have revealed several “hidden faults” jeopardizing the effectiveness of the law.

In addition, the scheme has been forced far over the limits of the available resources to a quantity of projects without coherence and without strategic (as well as social) value [2].

The financial constraints severely limit the application of this law and impose a thorough reassessment of the priorities assigned to the infrastructures which have been announced (and sometimes have already been the object of tenders).

While radically changing this policy, the Government should focus on the notion of “infrastructure” including both facilities and services and should therefore inspire its action to two guidelines: liberalization and effectiveness.

As far as the “contraente generale” system of procurement is concerned, some specific suggestions can be made on a technical ground according to the state of the art as it has been previously sketched. First of all it must be recognized that whenever a public client requires “pre-financing” from a prospective contractor, it is an obvious case of ppp scheme in which the public private partnership should also extend to the phase immediately following construction: i.e. operation of the built facility. This seems essential not only to assure that quality is delivered and checked through time but also that the contractor has a larger (and longer) payment on which to rely in order to make advance payments to the client reasonably “bankable”. This is especially advisable if Italy wants to favour the growth of few general contractors large (and strong) enough to compete with counterparts from other European countries which, at the moment, by far outweigh them. In this aim it is essential that Italian public clients improve their management skills: to achieve this goal in the short term contracting authorities should resort to the services of professional project/construction managers (pcm) to help them govern the whole process and make sure that the works are delivered in time, at cost and with quality adequate to the stated performance requirements.

To implement any approach of public private partnership, contracting authorities must resort to the services of professional project/construction managers (pcm) to help them govern the whole process. And, on the other side, contractors must do the same as their internal management skills can rarely match those of professional organisations. [13]

This is not only a guarantee that the works are delivered in time, at cost and with quality satisfying the performance requirements, but also needed to accelerate the evolution of the construction market to an essential component of the “service economy” where private partners offering both capitals and managerial skills can thrive [14].

## REFERENCES

[1] EC directive 93/37, and now also Directive 2004/18/EC on the coordination of procedures for the award of public works, supplies and services contracts. Article 1, 2 (b) states: *"Public works contracts" are public contracts having as their object either the execution, or both the design and execution, of works related to one of the activities within the meaning of Annex I or a work, or the realization, by whatever means, of a work corresponding to the requirements specified by the contracting authority. A "work" means the outcome of building or civil engineering works taken as a whole which is sufficient of itself to fulfil an economic or technical function.*

[2] *In order to gauge the state of material advancement of the Programme, the total cost of the works already examined by the Committee, €116.8 billion, [of which]: €49.4 billion are related to works downstream from the project approval phase (tendered, awarded, in progress and completed) and €67.4 billion refers to works in the planning phase, according to DIPE calculations based on "Rilevazione PIS" of February 2009. CIPE - Interministerial Committee for Economic Planning (2009): Report on the state of implementation of the Strategic Infrastructure Programme. Presented to the CIPE during the meeting of 6 March 2009. CIPE, Rome, pag, 53. Three years later, in September 2012, the total amount of works included into the PIS is grew to €235.3 billion (of which, only €96,6 billion were available), intended to finance more than 160 projects, as officially recognized by the *Programma Infrastrutture Strategiche-10° Allegato Infrastrutture*; published in September 2012 by the Italian Ministry for Infrastructures and Transports (available on line at: [http://www.cipecomitato.it/it/documenti/10x\\_allegato\\_all1.pdf](http://www.cipecomitato.it/it/documenti/10x_allegato_all1.pdf))*

[3] *This new contractual framework is intended to be very different from the traditional forms of procurement for the construction of public works, characterised by minimal risk transfer to the private sector contractor. The general contractor will enter in a date certain, fixed-price turnkey contract with the awarding authority, according to a design, build, finance and transfer scheme (dbft). While the awarding authority will take care of outline design, the general contractor will be responsible for developing final design, all the necessary authorisations and permits, performing the works (which can be sub-contracted [in whole or in part] to third parties), and for the prefinancing (in whole or in part) of the construction phase. Conversely, the general contractor will not be responsible for the operation of the new infrastructure, which instead will be transferred to the awarding authority upon completion and acceptance of the works. [De Pierris Luigi, Improving the Infrastructure, Pfi Journal, no. 40, January 2003]*

[4] *The general contractor is a brand new animal for the Italian legal framework. Basically, it is an*



*epc (engineering procurement and construction) scheme of contract with some specific features. His scope of work includes the definitive design as well as executive design. It includes land acquisition, construction, and work management and the provision of measures to prevent mob interferences. A special feature of the general contractor is what we call pre-financing. In practice, pre-financing is just a retainer: the purchase price is paid to the general contractor along the work progress, except for a portion, which is retained by the grantor. The purpose of the retainer is just financing. It is not by way of guarantee. In fact, the pre-financing bit is paid in full in one instalment upon completion, i.e. before the testing of the plant/works. [Vigliano, Franco (2004): Legal Framework for Infrastructure Projects in Italy; Stretto di Messina Roadshow, New York]*

[5] *Decree 190/2002 sets forth that the projects listed in the program shall be implemented (i) either by means of a construction and management concession in project finance or (ii) by appointing a general contractor who is fully liable for the correct execution of the works based on definite costs and within a certain time-frame. [Italian Government Relaunches Project Finance in Public Works and Strategic Infrastructures; Gop Newsletter, September 2002]*

[6] *General contracting provides the implementation in the national legal framework of the widest contractual relationship considered under public works directive (execution with whatever means of a work corresponding to the requirements specified by the contracting authority). In fact, according to the Italian legislation, the list of tasks attached to general contractor activity can easily bring this figure to ppp definition, as adopted in the Commission paper COM(2004) 327 final. The main difference between general contracting and construction concession is that only in the second case contractors carry the exploitation risk. [Contribution of AGI - Associazione Grandi Imprese to: Libro verde relativo ai partenariati pubblico-privati e al diritto comunitario degli appalti pubblici e delle concessioni (COM(2004) 327 definitivo), European Commission, Bruxelles, 2004 (full text at: [http://www.utfp.it/docs/libro\\_verde/italy/agi\\_en.pdf](http://www.utfp.it/docs/libro_verde/italy/agi_en.pdf))]*

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[10] *This new contractual framework is intended to be very different from the traditional forms of procurement for the construction of public works, characterised by minimal risk transfer to the private sector contractor. The general contractor will enter in a date certain, fixed-price turnkey contract with the awarding authority, according to a design, build, finance and transfer scheme (dbft). While the awarding authority will take care of outline design, the general contractor will be responsible for developing final design, all the necessary authorisations and permits, performing the works (which can be sub-contracted [in whole or in part] to third parties), and for the prefinancing (in whole or in part) of the construction phase. Conversely, the general contractor will not be responsible for the operation of the new infrastructure, which instead will be transferred to the awarding authority upon completion and acceptance of the works. [De Pierris, Luigi (2003): *Improving the Infrastructure*; Pfi Journal, no. 40, January 2003]*

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