THE ROLE OF
SUPREME AUDIT INSTITUTIONS IN AUDITING
PUBLIC WORKS

Report on the 13th UN/INTOSAI Seminar
on Government Auditing

Vienna
March 16 — 20, 1998
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I. INTRODUCTION

The joint UN/INTOSAI interregional seminar on "The Role of Supreme Audit Institutions in Auditing Public Works" was held from 16 to 20 March 1998 in Vienna, Austria. This event was the 13th interregional seminar organised by the Division of Public Economics and Public Administration, Department of Economic and Social Affairs (DESA), in conjunction with the International Organisation of Supreme Audit Institutions (INTOSAI).

In the past, DESA had initiated several training programmes, designed to support developing countries in strengthening their government audit systems. As part of these training activities, the United Nations, together with INTOSAI, organised international training programmes on government audit at biannual intervals. In the past 27 years, twelve such events took place, which dealt with the following topics:

1. General principles, methods and goals of government audit and related institutional problems (1971)
2. Techniques and methods used by supreme audit institutions with a view to improving financial and performance auditing (1973)
3. Public budgeting and accounting, the position of Supreme Audit Institutions in the modern state, audit of public enterprises (1976)
4. Principles of audit, organisation audit, performance audit and state audit of public enterprises (1979)
7. The audit of major development projects (1986)
9. Accounting and auditing of foreign aid programmes and EDP audit (1990)
10. EDP Auditing - Sharing experiences, opportunities and challenges (1992)
11. The role of SAIs in the restructuring of the public sector (1994)
12. The role of supreme audit institutions in fighting corruption and mismanagement (1996)

The most recent seminar was devoted to the role of Supreme Audit Institutions (SAIs) in auditing public works.

Altogether, some 50 persons attended the event, including SAI staff from developing countries and Eastern European reform countries. The United Nations, the World Bank, and SAIs provided lecturers (for a list of participants see annex).
The seminar started on 16 March 1998 with a plenary meeting and ended on 30 March 1998 after a total of nine plenary sessions and three meetings of the four working groups.

The main topics addressed by the 13th UN/INTOSAI seminar were

— Real-estate transactions prior to public works
— Audit of project planning including consideration of alternatives
— Auditing the procurement of services (contracts: tendering and award, etc.)
— The contribution of SAIs in avoiding and detecting corruption in public procurement
— Audit of the execution of projects, orderly delivery and acceptance of commissioned works, as well as billing.

In addition, a case study and country reports were presented.

— Estates management and case study on the new British National Library
— Country reports by participants on auditing public works.

This agenda vividly illustrates the wide scope and profundity of the topics covered.

Following the presentation of the main themes, a general debate and question-and-answer sessions provided participants with an opportunity to engage in in-depth discussions and summarise the major contents. The meeting then broke up into working groups for a more in-depth exchange of experiences on the main issues of the seminar, and to draw conclusions and draft recommendations.

In a number of presentations the representatives of individual SAIs outlined their experiences and provided a good insight into the responsibilities and possibilities of government audit in the context of public-works auditing, familiarising the participants with the various challenges and tasks in this area.

The creation of a legal and administrative framework to prevent and avoid corruption and mismanagement in awarding and implementing public works, further education and training of auditors with a view to improving technical audit skills needed to detect shortcomings in the system of public works implementation, the implementability of audit findings (e.g. sanctioning possibilities), the comprehensive audit of public works including financial, economic (capital and follow-up costs) and technical aspects, audit competence with regard to performance audits, and questions of international or bilateral co-operation of SAIs in jointly funded projects were issues which the participants regarded important. Moreover, it was stressed that auditors need specialist know-how and skills as well as professional competence to be able to assess the efficiency and effectiveness of public
works. These types of audits present an enormous challenge to SAIs with regard to the technical capabilities and skills of their staff.
II. SUMMARY OF THE INTRODUCTORY PRESENTATIONS

Dr. Franz Fiedler, the President of the Austrian Court of Audit and Secretary General of INTOSAI, welcomed the participants. He emphasised the importance of existing co-operation between the United Nations and INTOSAI as reflected by the long-standing organisation of interregional seminars and expert group meetings on government audit. The overall theme of the 13th UN/INTOSAI seminar was chosen in view of the significance of this topic for many countries, where governments spend significant amounts of public funds on the construction and maintenance of public works and where requirements planning was often insufficient. The execution of public works would frequently lead to mismanagement and corruption, and give rise to enormous losses, with a negative impact on the national finances.

In his inaugurate speech, Dr. Fiedler stressed the importance of auditing public works, as vast amounts of funds were spent in the construction sector. Therefore, the public at large had a heightened interest in the proper billing and the overall costs of these works. Apart from their intended use, public buildings often had an urbanist and aesthetic dimension, with a cost-benefit ratio that was not always satisfactory. The awarding of public works contracts tended to face the eternal dilemma of the government's quest for economy versus contractors seeking to maximise their profits. This may give rise to unlawful collusion, embezzlement etc., and lead to denunciations and criminal proceedings in the wake of construction projects.

Dr. Fiedler outlined that inadequacies in public works could have serious repercussions on the costs, in particular in the following areas:

— planning
— contract awarding
— execution of works (particularly if plans are altered)
— building supervision
— contract extensions which may become necessary
— poor or non-contractual execution
— follow-up costs
— rises in construction costs leading to higher funding costs.

Apart from material losses, the public authorities may also suffer immaterial damage (e.g. violations of the provisions governing monument protection or environmental protection).

Dr. Fiedler stressed that in fighting mismanagement in the construction of public works, SAIs mainly become active in ex-post audits. SAIs would detect corrupt relations and criminal systems (e.g. in contract awards, subsidies), lay informations about identified
corruption, support the prosecuting authorities in on-going criminal procedures and identify the reasons for false planning, waste, corruption and mismanagement. Importantly, SAIs also had a preventive role to play. SAIs were further responsible for verifying compliance with existing laws and provisions, preventing acts of corruption (e.g. accounting procedures, ensuring compliance with the "four-eyes" principle). All this would require an utmost degree integrity and ethics from auditors.

By way of conclusion, Dr. Fiedler called on the seminar participants to share their know-how and experience on the issue and thereby achieve a fructifying result of the seminar and contribute to improving financial management in their countries.

Welcoming the participants on behalf of the United Nations, Mr. Bouab, Officer in Charge, Division of Public Economics and Public Administration, Department of Economic and Social Affairs (DESA), stressed the high value accorded by the United Nations to these seminars and events and underscored the important role these training programmes played in particular in developing countries in improving their entire financial management.

The theme chosen for the 13th UN/INTOSAI seminar was of general interest, as public works were conducted in all countries and this sector benefited from considerable funding. Since auditing procedures were often ill-defined and the use of funds for public works often not subject to efficient control, many national economies had to face severe financial losses. As one of its goals, SAIs should develop independent and valid information for decision-makers. This would presuppose highly-trained and motivated staff as well as useful standards. By means of clear-cut audit objectives, audit programmes and standards, financial audits, documentary audits and performance audits, and by drafting audit reports that would identify the major problems and suggest recommendations, a contribution towards achieving a more efficient use of funds in public works could be made.

Mr. Bouab expressed his hope that the 13th UN/INTOSAI seminar would turn out a practical aid for SAIs in delivering their tasks of auditing and reporting on public works and that it would contribute to strengthening financial management in the countries concerned.
III. SUMMARY OF THE OUTCOME OF THE SEMINAR

Although the working groups used a different approach in dealing with the topic and produced outcomes that were differently structured, they were able to find common ground on many aspects.

The participants in the working groups unanimously agreed that the audit of public works was vital, e.g. by ensuring compliance with the principles of economy, efficiency and effectiveness in implementing such works, with the pertaining laws and regulations, as well as with the principles of financial and social adequacy and environmental sustainability.

The analytical study of the topic identified a number of reasons for mismanagement in public works, in procurement and investments for the construction of public works:

— excessive concentration of centralisation of powers
— weak points in organisational and administrative systems
— the lack of sufficient, efficient and effective internal and external control systems
— lacking transparency of government financial management
— excessive personal discretion in granting authorisations etc.
— lack of personal integrity of individual officials.

The following areas were identified as the main subjects in the audit of public works:

— audit of the pre-contractual phases (needs planning, etc.)
— planning
— project organisation
— funding
— tendering and award procedures
— legality of expenditures commitment
— earmarking of funds and adequacy of purpose
— audit of the government control and quality assurance systems
— handling of specific construction projects, contractual performance, execution of works
— use (examination of operating costs)
The participants stated the following key criteria for the successful audit of public works:

— Audits should be as timely as possible.
— The audit should be restricted to facts or project phases that were already completed (e.g. approved plans before the execution of works) so as to ensure a separation of executive and controlling activities;
— The external audit conducted by the SAI should be carried out independent of internal audit.
— The audit should include capital and follow-up costs.
— On-site audits should allow for a comparison of planned and actual results.
— By providing adequate information to the competent administrative units, the SAI should ensure that the audit findings are seen as being of general significance that extends beyond the individual case.

In order to be able to successfully fulfil their audit mandates in the field of public works, SAIs need to meet a number of standards:

— independence of the SAI (in budgetary and staffing matters);
— mandate to audit all phases in the construction of public works;
— mandate to conduct financial, compliance and performance audits;
— consultation of the SAI in the drafting of laws and the development of effective public accounting systems;
— competence to assess the quality of existing legal provisions governing financial management (e.g. accountability, transparency);
— independent audit programming;
— right to conduct on-site inspections;
— sufficient and properly trained and remunerated staff;
— possibility to use external experts;
— development of audit manuals and on-going further development of audit methodologies.

The participants agreed on the following measures to facilitate the audit of public works and formulated the following recommendations:

— INTOSAI should work towards a bilateral and multilateral exchange of experience and the organisation of seminars at the regional level on the role of SAIs in auditing public works.
— SAIs should be involved in auditing financial aids, in particular with projects funded by international donors.
— SAI's should engage in a permanent exchange of information and experience, as well as in close co-operation with all national administrative departments and institutions involved in auditing public works, in particular with internal control departments. In this field, a co-ordinated approach is desirable.

— SAI's should be empowered to meet the demands of auditing public works they are faced with by being endowed with adequate and competent human resources, as well as modern technical equipment (information technology).

— Through constant professional further education and training, auditors should develop the skills necessary to cope with the changing demands of auditing public works.

— Codes of Ethics should be drafted for public service and their compliance monitored.

— SAI's findings (audit reports) should be publicised in an appropriate way.

— Compliance with the recommendations contained in the audit reports should be monitored (follow-up audits).

— SAI's should be empowered by national legislation to directly seize the competent courts in criminal cases which may arise.

The participants stressed that the presentations as well as the following discussions and group work provided valuable stimulus for the activities of SAI's in auditing public works in their countries and may give rise to better audit access.

The topic addressed was of immense interest to all participants. The 13th UN/INTOSAI seminar triggered a positive response among participants, in particular because of the outstanding quality of the presentations, the smooth organisation of the event and the ample opportunity that was provided for an exchange of experiences and ideas.

The participants recommended in particular the promotion and further strengthening of an exchange of information in this field, as well as the publication and dissemination of the results of the seminar and the final seminar report to all INTOSAI members.

The participants rated the 13th UN/INTOSAI seminar as a valuable aid for their work and unanimously agreed on the necessity for further seminars on government audit in order to meet the increasing need for knowledge that is associated with the development of audit tasks in an even better manner.
IV. MAIN PAPERS

1. Belgium:
   Real-estate transactions prior to public works
   *(The audit of compulsory purchases in the public interest by the Belgian Cour de comptes, status quo and future outlook, the current and future roles of the Belgian Cour de comptes)*

Summary

Article 16 of the Belgian Constitution ensures the protection of private property by allowing the acquisition of real estate by the state only within the framework of a compulsory purchase procedure and only on the grounds of public interest and by means of a fair and prior compensation.

Under the Constitution, the ordinary law courts and tribunals are mandated to examine the legality and regularity of compulsory purchase procedures, and to ascertain the fair amount of compensation paid to the expropriated individual. This safeguard has been strengthened by the creation of the State Council (*"Conseil d'Etat"*) in 1946 which is empowered to nullify every administrative act for breach of form, or for excess or abuse of power.

For ten years, the citizens have been enjoying a legal remedy against any official measure by the federal state, the communities or the regions, if such measure is inconsistent with the competences of the state institution or the principle of equality stipulated in Articles 10 and 11 of the Constitution.

Consequently, the Belgian *Cour de comptes* has played a modest role so far in auditing the legality of real-estate acquisition procedures, particularly for the realisation of public works. The current mandate of the Belgian *Cour de comptes* and the principle of res iudicata prohibit the *Cour* from challenging the rulings of law.

Most recently, Parliament sought to extend the competences of the *Cour de comptes* to include performance auditing. The *Cour de comptes* is thus empowered to evaluate the real-estate policies of the public authorities at its own initiative, or at the request of the Chamber of Representatives, or the Council of a community or a region.

New vistas are being opened up in performance auditing of state assets, viz. their protection, assigned use and maintenance.
Recent legal provisions on the need to substantiate administrative acts and on the publicity of government administration have strengthened the rights of citizens and should allow the Cour de comptes to exercise its newly given mandate.

**Introduction**

**Capital spending yesterday and today**

Today, capital spending has lost some of the importance which it had during the 1960s and 1970s. The network of motorways is completed and the public authorities today hold a surplus of real-estate property. With the disappearance of the Soviet threat, large scale real-estate investments for military purposes have come to an end.

The challenges of the 21st century have focused the debate on public capital spending towards issues such as environmental protection, urban renewal, rural planning/development, and communication. New investment is needed. This new investment in turn requires new forms of real-estate acquisition.

**Current status of audit work by the Cour des comptes: auditing for legality and regularity**

A look into the jurisprudence by the Belgian Cour de comptes reveals only very few cases where the legality of decisions endorsing compulsory purchase or the amount of compensation paid to real-estate owners who were expropriated or who ceded their property to the state on a voluntary basis was questioned.

It seems of interest to analyse why there is a lack of findings by the Cour concerning the payment of compensation paid under compulsory purchase arrangements, while it formulated a large number of findings on the regularity of awarding procedures and on the implementation of public-sector procurement.

The Belgian Constitution reflects the intentions and motifs of its authors by allowing for compulsory purchase - the only allowed method for the enforced acquisition of land by the state - only in the public interest and against just and prior compensation.

The Constitution entrusts first and foremost the ordinary law courts and tribunals, and then the Conseil d'Etat and the Court of Arbitration, with reviewing all government acts as to

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1Except for requisitioning procedures during war-times, the law does not provide for any forced acquisition procedures for movable property.

2Article 16 of the Constitution, which allows for compulsory purchase only in the public interest and against just and prior compensation, has remained unchanged since 1831.
their compliance with the constitution and the laws, as well as the fairness of the compensation paid.

Given these conditions, the payment of compensation to the owners which is submitted to the Cour de comptes for endorsement is either the result of a final judgement or of a decision of an administrative authority, legality of which has always found to be unquestionable.

Against this backdrop, the Belgian Cour de comptes has never played more than a subsidiary role in auditing transactions in the forefront of public works.

Audit by the Cour de comptes: future outlook

On Thursday, 29 January 1998, Parliament unanimously adopted a bill which will profoundly alter the Cour de comptes' audit portfolio in the future.

The Cour de comptes has now been mandated to conduct performance audits, which means it will evaluate the performance of government action and policies.

Part I The Belgian Constitution - protection of private property

Conditions for compulsory purchase on the grounds of public interest.

Developments. The role of the law courts and tribunals. The tasks of the Cour de comptes.

1. Article 16 of the Belgian Constitution: compulsory purchase on the grounds of public interest

Article 16 of the Constitution runs as follows:

Constitution - Article 16. "No person shall be deprived of their property except on the grounds of public interest, and in the cases and according to the forms prescribed by law, and by means of a fair and prior compensation."

Inscribed in the Belgian Constitution since 1831, Article 16 is a powerful safeguard against any deprivation of the right to ownership.¹

¹Article 16 of the Constitution does not contain a clause that would prevent the public authorities from restricting the usage of the property without a right to compensation. However, these easements in the public interest must not absorb the entire useful value of the asset.
Compulsory purchase, i.e. the forced deprivation of the right to ownership is hence forbidden in principle, except in a number of conditions which are exhaustively defined by Article 16 of the Constitution.

1. The compulsory purchase must be in the public interest.
2. It may only be conducted in the cases and the form stipulated by law.
3. There must be fair compensation.
4. The compensation must be prior.
5. Under the Constitution, the ordinary law-courts and tribunals shall determine the amount of compensation and ensure that the procedures are complied in the case of a challenge.

In the debate between the protection of the rights of the individual and the needs of collective life, the basic law allows the right of ownership to be encroached upon only in circumstances that are outlined exhaustively in the Constitution.

Set up in 1946, the Belgian Conseil d'Etat is empowered to invalidate every administrative act in the context of compulsory purchase proceedings if there is an excess or abuse of power, or a breach of form.

With the law of 6 January 1989 taking effect, the Court of Arbitration may quash any official decision emanating from the federal state, the communities, or regions, for overstepping their jurisdiction or for breach of the principles set forth in Articles 10 and 11 of the Constitution which guarantee equality between the Belgian citizens as well as the principle of non-discrimination.

Hence, the individual is endowed with a number of legal remedies which allow him to secure his rights.
2. **Developments and trends**

Requirements with regard to the objective

a) **The role of the judge**

Compulsory purchase can only take place **on the grounds of public interest**. This notion has progressively widened to embrace meanings such as "usage in the general interest" or "private usage of general interest"\(^1\).

It is the task of the **legislation** and - within the statutory limits - that of government administration to assess whether any interest can be qualified as being a public interest. The judge himself can only put forward his assessment on the appropriateness of or the need for a compulsory purchase.

The judge may, however, examine whether the government authority did not **abuse or exceed its powers**. In other words, it is incumbent upon the judge to assess whether the government authority did not exploit the compulsory purchase proceedings to satisfy an individual interest, or overstepped the limits of its evaluative competence.

b) **The role of the Cour de comptes**

The **Cour de comptes** passes judgements on the legality of public expenditure. It is also authorised to probe into any abuse or excess of power?

While the **Cour de comptes'** jurisprudence does not contain any such case, it is hard to see why - under the heading of auditing expenditure for legality - the collegiate board ("college") should not refuse its endorsement to an expenditure used as compensation to expropriated persons invoking that the expropriated property had been acquired by abuse or excess of power, a condition which would make the expenditure unlawful.

If, however, the compensation for compulsory purchase were settled in the course of judicial proceedings, with the compensation being set by a judge, the **Cour de comptes'** refusal of endorsement would be contrary to the principle of **res judicata** on the one hand, and to the principle of the separation of powers on the other.

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\(^1\)Cf. the laws of 1 July 1858 and 15 November 1867 on expropriation by zones or the Walloon Code of regional planning, which allows the acquisition or real estate necessary to implement the prescribed targets of the zoning plan.
Requirements with regard to the procedure

Compulsory purchase is limited to the cases and forms laid down by law, this is to say by virtue of a law - or more frequently a royal decree or a decree of a community government or a region, which gives the go-ahead for the works which had necessitated the compulsory purchase in the first place.

The judge must ensure the legality of the compulsory purchase, i.e. he must examine whether the decision was specifically made in due respect of the prescribed forms and procedures.

The Cour de comptes, for its part, can then examine the compulsory purchase for legality, given the above reservations.

Requirements with regard to compensation

The compensation must be:

— full, which means it must suffice to cover the amount of loss suffered;

— prior: the expropriating authority will obtain a title of ownership of the asset only after the amount of compensation has been transferred or deposited. This is to say the title of ownership follows the transfer of ownership. The moment the judge ascertains that the formalities prescribed by law have been fulfilled, he will make a declaration to this effect in his judgement, by means of which the actual transfer of the property is implemented before the amount of compensation is fixed.

It is only the ordinary law courts and tribunals which are competent to decide on challenges arising from the right to a fair and prior compensation.

Once the judge has fixed the amount of compensation, it is difficult to see how - in terms of the above defined principles - the Cour de comptes could question the legality of the expenditure, either because it were not sound or prior, or because the amount such fixed would be contrary to the interests of the treasury.

Conclusions

1. The Constitution clearly stipulates that the interests of the owner prevail over the interests of the treasury.

2. The owner enjoys a wide-ranging scale of legal remedies in order to have his claims enforced and the rules governing the compulsory purchase procedure complied with.
3. Compensations are fixed by decisions from the judiciary, or after an out-of-court assessment procedure, under the supervision of the judiciary, the Conseil d'Etat, or the Court of Arbitration.

4. Because of the prevalence which is given to the protection of private interests and the complex and wide-ranging remedies open to owners, any re-assessment by the Cour de comptes is practically precluded.

Example

In a ruling by the Court of Arbitration of 17 December 1997, a regulation adopted by the Walloon region which stipulated a mode of calculation for the fair and prior compensation (Art 20, decree of 27 June 1996) was invalidated.

The Cour de comptes examined this legal provision for its compliance with the constitutional provisions and held that the decreed provision could lead to compensations being fixed without consideration of all elements which must be taken into account for its calculation. The provision such decreed was nullified.

PART II: Extending the role played by the Cour de comptes

a) The law of February 1998 amending the organic law governing the Cour des comptes

On 29 January 1998, parliament adopted an amendment to the organic law governing the Cour de comptes of 29 May 1846.

This amendment expands the Cour de comptes' audit mandate to include performance audits.

Clearly, the Cour de comptes is not called upon to criticise the opportuneness of expenditures. However, it should be noted that the concept of opportuneness, which was not taken up by the law and which was not defined in the preparatory stages - is ambiguous. It will be the Cour de comptes' task to delimit its meaning.

In the following, the concept of opportuneness shall first be discussed followed by a description of the new audit perspectives the Cour de comptes is facing in the wake of the law of February 1998. We shall then take a look at the importance of legal provisions on the formal substantiation of administrative acts, on the transparency of government
administration, and on the role of the mediator\(^1\). These provisions afford both the individual and the *Cour de comptes* new opportunities for control.

**b) The concept of auditing of opportuneness**

The French *Conseil d'Etat* has developed the concept of legality auditing of declarations maintaining "public-interest" to embrace an audit of their opportuneness.

Thereby it has ruled that "...under the law operations can be declared as being in the public interest only, if the encroachment upon private property, the financial cost, and possibly the social inconveniences it entails, are not excessive with regard to the interest at stake (French Conseil d'Etat, 28 May 1971)".

Along the same line of reasoning: "...prefectural decrees declaring the acquisition by the state of a private mansion to accommodate the needs of a big school, as being in the public interest, shall be null and void, whereas - with regard to the cost of acquisition of the building, as well as the cost of the necessary adaptations for putting it to its intended use - such measure could not be qualified as being "in the public interest" which would legally justify the compulsory purchase. (French Conseil d'Etat, 16 April 1980).

The Belgian *Conseil d'Etat* for its part has held itself competent to examine whether a decree or decision of a municipal council weighing the different interests involved would carry sufficient legitimisation. The *Conseil d'Etat* found in one instance that a cost estimate for the alternative solution suggested by the complainants had not been prepared, and that other solutions had not been sought" (Belgian *Conseil d'Etat*, 5 March 1981).

**c) The new mandate given to the Cour des comptes (Law of February 1998)**

Should not this conceptual development of the notion of "opportuneness" be viewed in perspective of the new law, which widens the audit mandate of the *Cour de comptes* to include performance auditing, in particular with a view to auditing the efficiency of the expenditure (= amount of expenditure in relation to the objective of public interest pursued by a compulsory purchase)?

It appears that as of now the *Cour de comptes* could be called upon to express its judgement on the economic sense of a compulsory purchase, its efficiency and effectiveness (were the means used appropriate to reach the intended objective?)

\(^1\)Constitution; Article 32; Law of 29 July 1991 on the formal substantiation of administrative acts; Law of 11 April 1994 on the transparency of government administration; Law of 22 March 1995 installing federal mediators, and royal decree of 27 June 1994 governing the composition and the functioning of the "Commission for the access to government documents"
In the parliamentary debate on the draft law, the members of parliament recalled that the *Cour de comptes* was not authorised to examine the opportuneness of government decisions. This limitation was neither taken up in the text of the law, nor defined in parliamentary work.

Through threefold dimension of performance auditing, the strict framework of auditing of legality imposed on the *Cour de comptes* since 1830 was overcome.

Under the conditions foreseen by the law of February 1998, the *Cour de comptes* may actually declare a compulsory purchase as too costly with regard to e.g. the market situation, or that the cost was in no relation to the benefits, or even that the compulsory purchase was not suited to attain the intended objective of public use.

In a case submitted to the *Cour de comptes* concerning the discontinuance of construction works of an army barracks, the auditors, anticipating the amendment to the organic law governing the *Cour de comptes*, enquired about the fate of the expropriated land which had become useless to the Ministry of Defence. It was found that the former owners occupied the expropriated property without the government having demanded the payment of rent. The ministry had stressed in its response that the former owners were doubtlessly exercising their right of retrocession otherwise the property would be resold very quickly.

The *Cour de comptes* hence studied the immediate usefulness of the property acquired under compulsory purchase proceedings and ensured that the forcibly acquired property was managed in the interest of the treasury. The case is still pending.

**d) Substantiation of administrative acts and publicity of government administration**

The fundamental principles enshrined in the new legislation are based on a radical reversal of the time-honoured traditions of secrecy and arbitrariness.

The administration must henceforth formally substantiate its decision by indicating in the file the points of law and the points of fact underlying the decision.

The legal text stipulates that this substantiation must be adequate and that the government authorities shall not be dispensed of the obligation to formally substantiate the administrative act by invoking urgency.

According to the jurisprudence of the *Conseil d'Etat*, every administrative act must be substantiated in the sense that any arbitrariness of an administrative act could justly lead to its revocation.
In the past, individuals found it hard to claim the arbitrariness of a decision when there was no obligation to provide a formal substantiation for decisions.

Moreover, the new law obliges the government authorities to make available to all interested persons all documents for on-site study. Also, they shall be furnished with explanations for their case and receive relevant copies.

With these provisions, the individual will be able to examine the opportuneness of administrative acts, meaning the relation between the objective pursued and the means employed.

These provisions, especially the formal substantiation of administrative acts, should allow the Cour de comptes to fulfil its new mandate of performance auditing. In this respect, the Cour de comptes could evaluate the consistence between the Appropriations Act and the substantiation, i.e. the internal legality of the administrative decision.

On this particular point, every compulsory purchase decision will soon be subject to a renewed examination by the Cour de comptes.
2. India:

Audit of project planning including consideration of alternatives

1. Generally, the phrase ‘Public Works’ connotes the infrastructure of the physical framework of facilities through which goods and services are provided to the public. Its linkages to the economy are multiple and complex and it affects production and consumption directly. By its very nature and dimensions it involves large flows of expenditure. Public works cover a wide spectrum of construction like roadways, railways, power generation, distribution, water supply, drainage, sewerage disposal, irrigation, ports, housing etc. The availability of adequate infrastructure facilities is a must for economic development of a country and in that context Audit Institutions attach a lot of importance and devote significant audit resources for the audit of public work projects to ensure that the accountability exist at all stages of the planning, implementation, monitoring and evaluation of these projects so that the society gets the best value for the investment made.

2. The main phases of the project planning can be considered as (a) conceptualisation and project identification to meet established needs, (b) detailed feasibility report, its appraisal and investment decision, (c) preparation of detailed project report, detailed designs and drawings, and specifications, (d) implementation of the project, (e) maintenance and cost recovery, (f) funding sources.

3.0 PROJECT FORMULATION:

3.1 While examining the need for the project and its formulation, the factors which will govern the selection of the project will depend on many social and macro-economic policies Government is following. Accordingly, a social cost benefit analysis carries an over-riding weightage compared to the financial criteria of adequacy of rate of return. This analysis may take into account the objectives like increased aggregate consumption, redistribution of income amongst various regions for a balanced economic growth, distribution of benefits to the greatest number, generation of new employment opportunities, provision of basic social welfare facilities and environmental protection etc. Country specific needs will decide the comparative emphasis of various objectives and facilities. For example, in a large country like India or China, removal of regional disparity may carry greater concern than in a small country like Mauritius. Similarly, development of highways and ports may be a priority for a developing country to push up its exports while in a developed country like Japan with enormous trade surplus, stimulating domestic demand may be a serious agenda. The techniques of such a calculation are highly complicated and time consuming and its worth will be decided by the assumptions and weightages given to various objectives.
Audit scrutiny will involve examination whether the assumptions forming the basis of project formulation are found to be realistic. Even slight deviation can affect the calculation of the cost, anticipated benefits, computation of internal rate of return or social cost benefit ratio etc. It will be desirable to see in Audit that a reliable data base was available and made use of, while calculating the availability of inputs, determination of demand and projected utilisation of assets. If there are prescribed norms and procedures to ensure adequacy of feasibility investigation, then Audit has to see that these were rigorously applied because that only ensures that the project selected, deserves priority over other projects which also could have met the perceived need.

A concrete example of primacy of economic rate of return are the irrigation projects where the mere irrigation rate to be earned for supply of water may not establish the financial justification of the project and calculations have to provide for direct and indirect benefits on account of double cropping, more remunerating price of crops, higher yield etc. Generally, irrigation projects are, therefore, considered on the basis of economic benefit criteria rather than financial return criteria. The benefit of the project is represented by a net increase in gross value of the post project crop production while the annual cost is the total of interest on total cost, depreciation and operational and maintenance charges and any project with benefit cost ratio higher than 1.5 is considered acceptable and in a chronic drought area even a ratio of unit may be enough to justify the project.

True that the Government is the best judge of necessity of a project, audit can check the actualisation of the assumed benefits. To illustrate the point, in one irrigation project in a State in India, it was noticed that the irrigation project taken up in 1977 had to be modified in 1981 to comply with the World Bank norms; the benefit cost ratio which was calculated as 3.46 in 1981 by the irrigation authorities was not vetted by the Agriculture Department and the assumption that the irrigation standards would be improved through the construction of micro distribution system on a block by block basis, the construction of control structures and release of water on planned basis, did not materialise and water continued to be released by adhoc methods resulting in under-utilisation of the created irrigation potential.

FEASIBILITY REPORT:

The detailed feasibility report contains information on technique, marketing, organisational and environmental aspects along with the economic and financial viability of the project. Audit has to see whether the studies and investigations forming the basis of the report have been conducted with thoroughness. The existing facilities, availability of adequate inputs including manpower, organisational set up, maintenance and operational requirements, financial, economic and environmental impacts will provide the complete profile of the project and Audit has to see whether the alternative projects have been considered taking into account the total picture. For an example for drinking water supply
schemes in the developing world where power supply may not be assured 24 hours in the rural areas, the water supply projects have to consider the alternative of installing handpumps with deep bored tubewells as against the pipe-water supply schemes.

4.2 In land development projects of a city development, the proportion of areas earmarked for various land uses like, residential, commercial, institutional, transportation and greens has a crucial impact on costing of serviced plots and alternatives have to be worked out so as to maximise the remunerative land use and minimise the non-remunerative areas while complying with the town planning norms at the same time. In Dwarka, a city project of Delhi, consideration of various alternatives resulted in increasing the remunerative land use from less than 50% to 58% and thus providing a lower break-even rate per sq. meter enhancing the acceptability of the plots and the structures and affordability of the houses developed by the Delhi Development Authority.

5.0 **PROJECT DETAILS:**

5.1 **PROVISION OF COMPLEMENTARY WORKS:**

The full utilisation of any project will depend on making sure that other complementary infrastructure activities are also taken up in time and in tune with the project under examination so that the benefits start flowing at the earliest. An interesting example of failure to appreciate the necessity of multi dimensional planning and appraisal for an irrigation project was highlighted in the Audit Report for a Project in India where the project started in 1960 was mostly completed by 1980 but the percentage utilisation was only 25% and efficiency of water use as measured in terms of area actually irrigated per cusec of discharge reached .058 only against the expected efficiency of .125. Analysing the reasons it was found that the fields in the Command Area were undulating and required proper land levelling which was not taken up till then; water courses and field channels were not maintained properly by the cultivators which was the presumption in the Project Report 1972. In fact, the Chief Engineer admitted that the cultivators sowed crops not requiring any irrigation during rice crop season and did not require it in 30% of the area in wheat growing season. Therefore, even after 6 years of availability of irrigation water from the distribution system, the Command Area retained the characteristics of unirrigated cultivation. Drainage was a serious problem in that area and to deal with seepage and water logging, there being no provision in the Project Report, the work had to be entrusted to the Command Area Development Authority after the whole irrigation system had been built up. In fact, the Command Area receiving heavy rainfall with a heavy retentive black soil should have been cleared in the beginning and concurrent development measures by other agencies like Agriculture, Land Settlement, Land Revenue Departments should have been initiated in addition to building faith among the cultivators in the profitability of adopting such crops which would make use of their irrigation water during the non-rainy season.
5.2 Similarly, absence of synchronised projects led to wastage of a lot of treated drinking water in a town where the scheme commissioned in February, 1978 at a cost of roughly Rs.30 crores could not serve completely the intended beneficiaries since the water supply project of Public Health Engineering did not include any provision for remodelling of the existing distribution system under the control of the city Corporation. From 1978, additional quantity of water by about 20 MGD was added to the existing supply of roughly 10 MGD in the city. But even then, there were complaints from consumers about the wastage and inadequate supply. On investigation it was found that adequate number of inter-connections between the new and the old distribution mains had not been provided; a number of overhead reservoirs of the existing colonies had not been connected to the new distribution system and control valves had not been provided to prevent wastages. On a conservative estimate about the project 10 MGD of water out of the total drawl of about 20 MGD from the scheme was being wasted daily and the cost of pumping alone of this wasted water was roughly Rs.50 lakhs per year.

5.3 **TECHNICAL APPRAISAL CAUTION:**

It may happen that as per the available details, with reference to the approved parameters a project is apprised as fit for investment but some technical precautions may be desirable before starting the work. For example, for the piped drinking water supply schemes in the hilly areas of northern India, the conditions generally imposed may be – (a) before starting on the gravity projects, level be again measured for the site selected for water tanks, (b) where the analysis was based only on one year discharge data of the sources it should be rechecked that there would be no shortage of the required water discharge, (c) the alignment of the gravity supply line should be such which will be affected to the minimum from the possible landslides for a number of years to come. Audit has to see that such conditions which are precautionary in nature but very crucial to the life of the project, are mentioned in the project appraisals before investment decision is conveyed.

5.4 **DESIGN ALTERNATIVES**

Generally, Audit does not check the design at the project planning stage. It may not be fully equipped to examine by itself the economy of the design but following points may be seen from the economy and effectiveness consideration:

(a) Whether specific need of users gathered
(b) Whether alternative designs and cost implications were considered
(c) Whether reliable data from land survey and site investigation were obtained.
(d) Whether necessary clearance from Regulatory Bodies like Town Planning Authority, Fire Services Department, Environmental Deptt.etc. were obtained.
5.5 **Examples:** In a Piped Water Supply Scheme, satisfaction of the design being least cost solution for the distribution system with reference to water discharge, duration of power supply and capacity of storage tank, should be on record. In designing of lay-out of a town, total road length decides the efficiency of land use and economy of provision of services. Whether minimum road length option has been worked out, can be enquired by audit. In a housing project whether various combinations have been attempted to get the maximum utilisation of the floor area permissible with the maximum permissible number of dwelling units, has to be seen. In a new sub-city project with high proportion of low lying land, it may be necessary to work out the output cost per square meter with reference to various engineering designs and land uses before the most economical design is finalised.

5.6 In a Water Supply Scheme in India, Audit noticed that the prescribed period of 30 years as per the Water Supply Manual and Central Government directions were ignored at the design stage and the scheme took care of town requirements for 8 years only. The realignment of distribution system stipulated to be designed after detailed computer analysis was not formulated with the result that full capacity of the project could not be utilised by the system.

5.7 Audit pointed out in an irrigation project, that though the reservoir was likely to submerge 2025 hectares of forest land, incorrect assumption in 1977 regarding this resulted in transfer of only 944 hectares before the work was completed in 1989. Transfer of additional land was held for want of clearance by Govt. of India, Forest Deptt. (1995), consequently the reservoir had been filled up during 1988-95 to only 20 percent of its designed capacity.

5.8 In a recent study of a twin tower office complex construction at Delhi, it was found that original design for the curtain wall system adopting a wind load factor of 170 kg./sqm. was erroneous and had to be revised at 342 kg./sq.mt. as per Indian Standard Code 1987, applicable and in existence prior to finalisation of original design. Old section had to be dismantled and cost of the wall escalated to 1.5 times as per correct design.

5.9 **SPECIFICATIONS**

Specifications of various items of work have naturally a direct bearing on the estimates of cost and choice of economical specification consistent with quality, should be carefully made in the project details. If audit has an idea of techno-economic features of various choices available in the use of material or equipment it can point out lack of or incomplete examination of alternatives.
For example in development of large green areas, one alternative could be not to incur any expenditure on development of fountains and lawns within the green area; no tree guards to be provided within the park; boundary wall along with greens to be provided only when it faces main road otherwise chain link fencing with stone masonry could be enough. Similarly, while developing a neighbourhood shopping complex where commercial plots are to be parcellled out and sold in market, land filling when required could be limited to the road network and individual plots may not be taken up for filling; in Piazza portion, it may be appropriate to provide calcium silicate blocks in place of high quality stone flooring; earth filling may be done with fly-ash and top 30 cm only be covered with good earth.

Sometimes, inadequate investigations may lead to change in specifications resulting in cost escalation as well as time over-run. Audit has to see whether reliable data was obtained after the prescribed investigations keeping to help decide correct specifications.

6.0 PROJECT IMPLEMENTATION

6.1 BUDGETING

The budget preparation and presentation can have alternative approaches like simple financial outlay budgeting or zero-base budgeting or performance budgeting. Audit, in any case, has to see as to which sort of budgeting is in use and whether the physical performance is indicated against major components and the progress against them with funds spent and funds demanded with proposed progress are indicated either in supporting documents or in the budget itself. For example, in a drinking water supply project, the components like overhead tank, tubewells, distribution system and pump-houses should be indicated against every scheme and it can be seen whether the funds have been earmarked and used with reference to the progress expected as per the budget formulation e.g. it may not happen that pipes have been purchased and distribution system laid whereas the overhead tank work has not yet started. Similarly, in a land development work by any Development Authority, the components like road, sewerage, water supply, drainage, electrical works and horticulture are all indicated. In a housing work, the components could be brick work, RCC flooring, water supply, drainage and sewerage.

6.2 It would be interesting to examine whether the funds released are being linked with progress of work on different components as per the budget estimate at periodical intervals say, every quarter or every month, depending upon the magnitude of the financial outlays and the time-frame of the project.

6.3 Budget scrutiny will also reveal whether alternative cash outflows were considered with possible economical sequencing of work-flow. For example, in
development of a community shopping centre, storm water drains and pizza flooring may be taken up towards the end of the development activity when construction on half of the plots is over. Similarly, in a housing project, sequencing of services and building construction is to be so arranged that houses are ready for occupation by the time their construction is over and capital does not remain locked up in flats waiting for support services.

6.4 ORGANISATION

The general perception about public agencies executing public works has been that the public sector being the exclusive provider may not try for the competitive efficiency and it may also suffer rigidity in using resources, material as well as human. There is seen to be little connection between the cost of establishment and the total output. Generally, public works are executed under the control and supervision of multi-layer hierarchy of permanent staff. It is not possible for the Engineering Deptts., to down-size the manpower if the government funds start drying up with the result that the cost per unit of turnover goes up. While it may be unavoidable, in some cases at least alternatives are available to contain the overheads and that should be examined in Audit whether such an attempt was made. For example, a recently set up Engineering Organisation, may consider engaging private Project Consultants with full responsibility for detailed supervision by their own team subjected to supervision and monitoring by a limited but well qualified regular staff of the organisation. City & Industrial Development Corporation of Bombay has been able to manage huge development outlays with a lean staff strength by this concept and has contained the establishment charges to roughly 6% of the work-load whereas conventional Public Works Department’s estimates in India provide for 11 to 15% of the overhead charges in the estimate itself. Then there may be situations when the public works agencies get burdened temporarily with extra demand like Asiad Games or a short-period scheme sponsored by the Central Government. If the department does not adopt an alternative organisation structure, it may land up adding to its strength on a permanent basis to cope up with a temporary extra load and thus make its services highly costly and even unsustainable in the long run.

6.5 TENDERING

Tenders are generally invited in the prescribed form which has details like schedule of quantities of work, status of drawings, specifications of items of work, material to be issued by the Department as well as the equipment, applicable issue rates and hire charges. It also sets out the manner of measuring the work and making the payment along with stipulations regarding time, variation in quantities, price, labour regulations, penalties for delays and security deposit etc.
The alternative forms of tendering are - percentage rate tender, item rate tender, and lump-sum tender.

**Percentage rate tender**
Percentage rate tender could be used in respect of development works including levelling, storm water drainage, water supply and sewer lines. It could be suitably used for repetitive type of works such as construction of residential quarters of various types as per standard design and drawing.

**Item rate tender**
For item rate tender, contractors are required to quote rate individual items of works on the basis of schedule of quantities, worked out by the deptt. In conformity with architectural and structural drawings for the work. This form is useful where quantities can be worked out with reasonable accuracy. This form ensures more detailed analysis of cost by the contractor and as such, is considered to be more scientific.

This method becomes unsuitable when there is a possibility of large variations in quantities.

**Lump-sum tender**
This form is used for work in which contractors are required to quote a lump-sum figure for completing the work in accordance with the given designs, drawings, specifications and functional requirements. Lump-sum tender also may include the element of doing design work and preparation of structural drawings and working architectural drawings subject to approval by the competent authority. Lump-sum tenders may be called for the following types of work:

1. Overhead tanks, Bins, silos, chimneys, repetitive types of work like residential type quarters. In case work is required to be executed on lump-sum contract, the tendered documents should contain detailed working drawings, both architectural and structural, forming part of tendered documents along with detailed specifications of the work. The tendered documents must set out complete scope of work. A rough schedule of quantities may be appended to the tenderer for guidelines.

6.6 The alternative methods inviting of tenders may be open competitive tenders, selective tenders and two-stage tenders. Audit has to check whether the selective tendering has been adopted only where the work is of highly specialised type and NIT prescribes a sufficiently reliable bench-mark of technical competence, past performance and financial capacity. In two-stage tendering the technical bids are invited first and after their selection, financial bids are invited. In some cases single stage two envelopes system could be the alternative, where bidders submit two envelopes at the same time, one for technical and the other for price bids; the price bid is opened and evaluated only when the technical bids are
found acceptable. For complex engineering works, two-envelopes system is generally adopted. Audit has to scrutinise whether the technical requirements in the NIT have been met by the bidders and whether a proper computation has been made for quantifying the distinctive features of alternative technologies offered for its capital cost, operation and maintenance, replacement, availability of spare-parts facility of repair during the life span of the works, and the dependency on a single source etc.

6.7 MAINTENANCE OF PUBLIC WORKS

Generally, Govt. prescribes norms for maintenance expenditure for different types of assets. Audit has to examine the adequacy of these norms along with the allocation and utilisation of funds for maintenance. This may result into discovering soil conservation measures which were inadequate in the catchment areas of major irrigation projects threatening reduction in the project life because of resulting extensive siltation. Cases of abandoned projects, incomplete projects or unproductive projects detected in Audit, will point to the inadequate maintenance.

6.8 Coupled with this is the issue of recovery of maintenance charges in works like irrigation or drinking water supply schemes. Conceding the finality of government’s declared policy of subsidising the supply of irrigation or drinking water, Audit can very well examine the alternatives of a better organisation set up, synchronising distribution and revenue collection at one point and the method of measuring the consumption of water by the household or the cultivators. A lot of leakages in supply system because of defective engineering maintenance or deliberate pilferage counted as technical loss, will be an area of serious audit scrutiny which can force the administration to adopt improved organisational set up or tighten vigilance machinery to ensure maximum revenue collection at the prescribed rates to finance the operation and maintenance expenses.

6.9 RESOLUTION OF DISPUTES

Wherever the public works agency gets the work done through the contractor, the agreement generally has a clause for arbitration to settle any dispute about the rates of payment or penalty proposed by the department or the compensation claimed by the contractor for such reasons as late handing over of the site or late supply of designs or late supply of materials as stipulated in the NIT. There could be alternatives like, not having any arbitration clause at all and thus compelling the contractor to take legal recourse which he will carefully assess unlike the arbitration clause in the agreement where it is a routine matter to claim compensation through the arbitrator. Third alternative could be to have a Dispute Resolution Board where case is decided by technical experts taking a practical view of the things and settling the issue in a spirit of reconciliation. Audit has to see whether the private parties have been exploiting government agency because of its poor
defence of the arbitration cases and thus causing avoidable escalation in the project cost. The Dispute Resolution Board or a reconciliation machinery is a recent concept being tried under World Bank Projects and this has the advantages over the other alternatives for both the public authority as well as the contractor, but it may work well only if the selection of contractor and the bidding procedures are rigorous with safeguards as are provided in the World Bank funded projects.

7.0 FUNDING

7.1 GOVT.FUND

Public investment has been almost an exclusive source for the public works in most of the countries since provision of merit goods for the benefit of the general public has been perceived as the basic function of the State in addition to the maintenance of internal and external security and adjudication of disputes among the individuals and various sections of the public. Wherever funding is provided by the various layers of the government i.e. Central, Regional and Local Bodies’ level, issues crop up about the designing of various alternatives for the most economical and efficient use of the resources. It may for example happen that for drinking water supply schemes to be executed by the regional authorities, Centre may provide only capital expenditure leaving the maintenance to be borne by the regional or the local bodies’ authorities. Audit may, however, see whether this has been a prudent arrangement, particularly with reference to the poor regions which do not have funds to maintain the schemes and which may ultimately mean diversion of further central funds from capital to maintenance use or wastage of the assets by their disuse over a period of time and avoidable consequent heavy replacement cost for which there may be no provision available at that time. The other aspect concerns schemes being sponsored by Central authority but funds received remaining unutilised by the regional authorities thus defeating the purpose of the scheme as well as making it ultimately very costly and ineffective instrument of economic development. Audit has in such cases to see whether the alternatives could be a tightened monitoring at the central level or asking the regions to devise their own schemes which on proper execution can be suitably reimbursed or rewarded by Centre.

7.2 PRIVATE SECTOR FUNDS

(a) A recent World Bank study estimates that developing countries invest about 4% of their GDP in public works and roughly 4/5 of this is financed through domestic public resources, 1/6 through international development assistance and the remaining through private capital. Future investment needs are expected to be much higher because of demand created by economic growth, rising population, rapid urbanisation and, above all, to make up for lack of adequate investment in some crucial areas in the recent past. In
most of the infrastructure services it is difficult to price them fully to cover all costs. These needs cannot, therefore, be met within the financial resources of the State. The quality and cost of infrastructure is one of the primary considerations for the new investments. It has, therefore, been realised now that greater involvement of the private sector within a competitive environment, is desirable, to increase the efficiency of investment and operations since they are better at assessing market needs and managing risks. However, the State will retain a strong role in production, regulation and subsidising of infrastructure. This means that State will assume more and more role of a facilitator rather than administrator.

(b) BOO (Build-own-operate), BOT (Build-operate-transfer) and BOLT (Build-own-lease-transfer) are the mostly used alternatives of private sector participation. BOO imposes the entire risk burden on the private sponsor and world-wise this accounts for an insignificant preparation of projects.

BOT transfers the facility to Government after a specified concession period on certain terms. During concession period, contractor charges the user a toll/tariff sufficient to recover the cost and earn a risk adjusted return on his investment.

For risk mitigation, structuring of debt instruments is vital. Various credit enhancement measures could be tried like debt securitisation, guarantees, escrow account, partial guarantee by World Bank. Risk factors may relate to project concept and cost, project supplies, market, sponsor commitment and strength, currency fluctuation, inflation, statutory regulations, legal risk and Force Majeure situations.

(c) The issues raised in any such arrangement concern the terms relating to risk sharing, pricing, sale, accountability, monitoring and fulfilment of social objectives etc. and, therefore, the Audit has to scrutinise (I) whether the alternative selected has been adopted after considering all the possible forms of taping private capital and (II) whether the terms of such participation are transparent and provide the best use of the public resources and ensure a quick and equitable social benefit. Audit has to see that proper policy guidelines and procedures are framed by Government and the award of projects to private sector is in conformity with those guidelines. The regulatory mechanism set up to monitor private sector in these areas should be appropriate and have enough statutory competence to insist on proper functioning of privately owned public utility and review its performance.

7.3 FOREIGN AID

The alternative of foreign aid versus Government fund and one foreign source against another can be evaluated with reference to the extent of general public to be benefited; the benefit expected from the project to generate indirect revenue for utilisation, readiness for
the implementation of the project including availability of land and other facilities and availability of manpower to meet technical and organisation requirements; requirement and availability of subsidiary funds to finance part of the work, contract and the efforts already under hand to promote the use of domestic products and services etc.

8.0 LIMITATIONS OF PUBLIC WORKS AUDIT IN EXAMINING ALTERNATIVES

8.1 By its very nature this audit involves areas, technical in nature. In countries like India which rely totally on documentary evidence to the exclusion of physical evidence, unlike China and Japan, it is further compounded. This calls for analytical abilities of a very high order which may not be sufficiently available.

8.2 While Audit may comment on inadequacy of feasibility or project reports it can transcend the reporting limitations itself only up to a stage. There are difficulties in testing the assumptions regarding demand, cost benefit, capacity of different equipments, synchronising of various operations etc. Many a time objectives and their weightages may not be susceptible of a neutral and precise quantification for evaluation and hence the comments may border on the point of encroaching a purely socio-political prerogative. Value for money audit may also be seriously hampered in the absence of a proper MIS under use by the project implementor and the project user authorities.

9.0 ISSUES FOR THE FUTURE

9.1 While audit institutions everywhere examine the project execution with reference to economy, efficiency and effectiveness of expenditure, the starting point is the design stage itself. SAI has to develop resources to examine the designs along with the alternatives considered before its finalisation. The choice of having in-house expertise may not meet the career aspirations of the technical personnel. On the other hand, contracting audit of designs to private agencies has implications for confidentiality and unbiased information. Perhaps the only solution is to develop perception of crucial technical points with the exposure to project site and technical papers as processed for the investment decision and to the extent possible insist on a built-in critique at design stage, the employment of check-list laid down by highly specialised and respected experts where the various parameters are necessarily calculated and compared through computers. Research in this direction is very much called for.

9.2 While the current practice, in general, is to take up audit of works after it has been executed and at best decide the timing so as to reconcile the need for contemporaneous audit enabling a mid course corrective action with the progress of expenditure, it does raise the question whether this project would assure the public, at
large, that projects are on time, within budget and will meet the intended expectations. While post project or a mid-course evaluation may provide the useful feedback for future projects or for remainder expenditure, it will not attack the crucial issue of an independent preview that is very much called for in view of the huge investment of public money and intricate long-term technical and financial arrangements not permitting any possibility of mid-term changes after the go-ahead. Therefore, post planning project review which could serve as forward information is very much called for enabling the audit to make useful comments which will prevent problems of time and cost overrun or ineffective utilisation of the project. It will minimise the possibility that the project may get derailed since it will ensure that the project is well conceived and planned before its execution. A debate on this and how to develop expertise for such a review can’t be postponed any long.

9.3 Greater attention to the inefficiency and wasteful use of services resulting from subsidy transfer has to be paid. It is a delicate task but looking to the scarcity of the resources and various studies establishing non-fulfilment of the real purpose by subsidies in many sectors, adequacy of charges has to be scrutinised in Audit. How to examine this aspect consistent with the social policy of equitable distribution of burden needs extensive research.

9.4 With the increasing association of private sector for public works and the setting up of regulatory mechanism, the Audit will face sensitive issues of balance between the Government and private agency in the risk sharing, cash management, accountability to the public and allocation of resources. Apart from the policy issues, and detailed financial calculation involved, Audit will also face problems about access to the books of the private owners for public utilities wherever reasonableness of cost of services has to be examined. The complex and sensitive mechanics of associating a private sector is highlighted by the World Bank Report –1994 stating “in the move from a government monopoly to a more competitive system, enforceable contracts are required to balance the interests of various parties in specific projects and to provide the stability needed in long term investment. Also required are comprehensive, transparent and non-discriminatory rules of the game. Regulation itself is imperfect because the right regulatory mechanisms are not always evident. It is also imperfect because effective implementation of economic regulation requires an information base and sophistication that are rarely, if ever attainable. Regulators are, therefore, vulnerable to manipulation”.

9.5 With the growing awareness about the environmental degradation all over the globe, environmental costing would enter into any decision about any public works project. Comparative trade between the ecological damage and the public need will have to be carefully evaluated. At macro-level it may even call for a deep insight into the economics of various alternatives based on the degree of ecological damage like emission level and the demand on land and water resources against the back-drop of competing demand of employment generation and economic growth. This area also will call for deep
understanding of the issues involved and evolution of audit methodology in asking the right questions, particularly so after the Rio De Janeiro and Kyoto Summits.
3. Spain:
Auditing the procurement of services (Contracts: Tendering and award)

1. INTRODUCTORY IDEAS

Governments frequently use contracting as a means to procure the goods and services they need to attain their objectives.

Among all the contracts entered into toward this end, public works contracts stand out in importance. Here a contractor commits to carrying out a specific project for the government for a certain price; these may be leasing contracts or contracts for an end product, but they always pertain to real estate or construction. And it is precisely these contracts -- or rather an analysis of contract oversight based on the experience of the Spanish Court of Audit, with particular attention to how they are regulated by the current Law on government Contracts of May 18 1995 -- that we will refer to in this presentation, although we recognize that the scope of government contracting does not end there. For instance, let us recall that in the area of public works the government can also enter into contracts to acquire the land on which to build, if necessary (as long as it does not use forced expropriation), assistance or consulting contracts to obtain the necessary technical services for the design of the project or to aid in the management, control, and oversight of the work being done, or, finally, supply contracts to purchase the needed building materials in those special cases in which the project is carried out directly by the government, without contracting a company.

Furthermore, within this category of contract we will focus on the procurement phase, during which the government solicits a number of tenders, accepts the one it considers best, and then makes the award. This can be considered one of the most important phases in the life of a government contract, and consequently, one of the most interesting aspects of the monitoring done by the Supreme Audit Institutions.

In effect, up until this point, and during the preparatory phase of the contract, the government does no more than internally work out its own intent, beginning with a study of the needs it hopes to satisfy through said contract, and the preparation of the corresponding plans and particular administrative specifications -- documents which set forth and define the work to be carried out, if possible in a manner that is complete, detailed, and definitive -- as well as of the legal and financial clauses that regulate the contracting and the execution of the work, this in addition to drawing up a budget for the contracted work and obtaining the corresponding legislative appropriation under the proper budgetary heading for the sufficient amount.
Then, in the procurement phase, the government discloses its intent to carry out the project through a contract and invites the tendering of bids by qualified businesses, so that it can choose from among those bids received that which is best suited to its needs. This selection involves the approval of the chosen bid (the award in its strictest sense), after which the parties come to terms and the contract is finalized. Personnel elements are also definitively decided -- the contracting authority and the contractor -- as are the real elements -- object and amount of contract-- ultimately giving rise to a binding agreement for reciprocal services.

2. TENDERING AND AWARD PROCEDURES

There are two distinct aspects of the procurement phase:

a) Tendering procedures, which are the established channels or steps for making public the government's desire to contract and inviting tenders from businesses interested in the contract. Advertising and tendering can be open or restricted, as we shall see.

b) Award procedures, or established systems for choosing the prospective contractor from the businesses offering bids as a result of the previous invitation. The award can be automatic, whereby the lowest of the bids presented wins (subasta), or it can be discretionary, whereby the bid is chosen that the contracting authority deems best after considering both its technical and economic merits (concurso).

On this point, Spanish law makes a clear distinction between ordinary tendering procedures, which may be open or restricted and may be used with either of the ordinary award procedures of subasta or concurso, and the exceptional procedure with its own form of selection -- the negotiated procedure, formerly called direct contracting, which owing to its serious limitations with regard to advertising and tendering may only be applied in specific cases set forth by law.

With respect to the foregoing the primary function of the Supreme Audit Institutions is first to verify if these tendering and award procedures have been used in exactly the right instances, and secondly if the rules governing them have been observed during their application. This requires prior knowledge as to both the proper instances for use of each and how they should be applied.

2.1. Ordinary tendering procedures: open and restricted.

The open method is a simple, linear procedure made up of one single phase during which, once the contract notice has been published in the proper official gazette (depending on the scope of contracting, i.e. European Community, national or local) companies interested in
obtaining the contract, both national and international, can tender bids during the time frame indicated in the notice, with the established limits given the aforementioned scope of the contract, and provided the requirements established by law are met by the respective companies.

In contrast, the restricted method contains two separate phases: in the first, again once the call for tenders has been published in the proper official journal, interested companies may present "applications to bid" which should be accompanied by documents proving that the conditions of economic, financial, and technical soundness required in the notice are met. In the second phase, once those applications have been received and the accompanying documents have been examined, the government will select those companies that it deems most suitable given the criteria set forth in the specifications. It chooses a minimum of five and a maximum of twenty companies, whenever possible, and then invites these to tender offers.

Beyond this difference, Spanish law does not establish an order of preference between these two ordinary tendering procedures, although based on their respective characteristics it is easy to deduce that normal cases call for use of the open method, since it is simpler and faster, and because it better respects the principles of open advertising and competition, which must be considered in the public interest, as they are based on the equal right of all qualified companies to legally make a profit through government contracts, a right derived from the constitutional principle of equal opportunities. In contrast, the restricted method can be reserved for more complex projects, in which cases special attention must be paid to the character of the prospective contractor.

In conclusion, the supervisory role of the Court of Audit as regards tendering procedures is rather simple; it is limited to verifying that the advertising requirements have been met -- the notice placed in the appropriate official journals, respecting the minimum application period established by law. Its role may be extended in those cases in which a minimal number of applications for participation has been accepted; here it would ascertain the reasons for rejection or determine the existence and content of any protest that might have been filed because of non-acceptance.

2.2. Ordinary award procedures: "subasta" and "concurso".

Once the bids have been received through either of the two ordinary procedures just described, one must be selected to win by means of one of two ordinary award procedure: the subasta or the concurso.

Under Spanish law "subasta" is defined as an ordinary award procedure, with automatic, or forced, selection, in the sense that the contract is necessarily awarded to the lowest bidder, or to the only bidder should there be only one. The "concurso" is the other ordinary award
procedure, with discretionary selection, in which the government should consider both the technical and financial aspects of the bids tendered, and in some cases the technical, financial, and commercial characteristics of the bidder, based on the criteria set forth in the specifications, with a view to selecting the offer that best suits the ultimate goals of the contract, without prejudice to its right to declare the bidding void for lack of suitable offers, even if several bids were tendered.

Both award procedures have advantages and disadvantages. For instance, the subasta has undeniable advantages owing to its greater ability to filter out higher bids and obtain the lowest ones, while its completely automatic and objective character makes it immune to any suspicion of corruption. Nonetheless, there is the disadvantage that it does not give enough attention to the technical and financial soundness of the bids, and furthermore, due to its automatic nature, it could give rise to awards going to bids that are too low to guarantee the proper completion of the project.

As for the concurso, this award procedure provides the unquestionable advantage of discretionary selection, which makes it easier to properly assess and evaluate the aforementioned technical merits of the bids and particular merits of the bidders. Conversely, however, because of its subjectivity, it can give rise to irregularities, whether involuntary or deliberately fraudulent, in decision-making. The establishment of fixed criteria has not been sufficient to make this system completely objective, for one must not forget that developing this scale and assigning points to bids are also subjective processes.

With regard to the respective application of each system, Spanish law establishes a theoretical equivalence of the two as ordinary award procedures, with a hidden preference for the concurso, as we shall see. In practice as well there is greater use of the concurso to the detriment of the subasta, which is relegated to contracts for very low-cost projects.

This notwithstanding, the Court of Audit has repeatedly criticized the underutilization of the subasta, since this award procedure, as was stated earlier, because of its objective and automatic nature, provides the best price filter and is the only one that can guarantee the absence of fraud, "which is easily committed in an area with such dangerous incentives," as we were already warned last century by the first provision to regulate government contracting in Spain, the Royal Decree of 27 February 1852.

In reality, according to the firm policy of the Court of Audit itself, the application of one system or the other is not the choice of the contracting authority, but is rather determined by the special circumstances of each contract. Accordingly, the subasta is the award procedure to be used for contracts the object of which is perfectly defined, making it impossible for the bidders to introduce any type of variants. This is precisely the normal case for public works contracts, in which, because they are for new building projects, the government can usually define the entire object up to the most minute details by way of the
corresponding thorough, detailed, and definitive plans, so that the final result will fully meet its needs. The *concurso*, on the other hand, should be the exception for building contracts, used exclusively for projects for which the government has not been able to design the aforementioned plans, which in this case are presented by the bidders, or when the government feels that its plans might be improved upon by technical solutions proposed by the bidders, or when the technical complexity of the project demands special attention to the particular characteristics of the contractor that goes far beyond that required in the admission phase of the restricted system discussed earlier.

Furthermore, it is not entirely true that the *subasta* system fails to take into account the technical aspects of the bids. The fact is that the required existence of those thorough, detailed, and definitive plans, which define the work into its smallest detail, creates what has been descriptively called the "technical homogenization" of bids. Since all bids refer to the realization of the same project, as it is defined in the plans, all bids must be considered equal in technical terms, leaving the economic factor as the only point of comparison; it is only logical that the award should necessarily go to the lowest bidder. Consequently, we can assert that the *subasta* also seeks to select the bid with the best quality-price ratio; the difference is that since the numerator in this ratio for each of the bids is the same, because of the aforementioned homogenization, the best ratio is given by the lowest denominator, i.e., the lowest bid.

2.2.1. The *Subasta*. How it works. The problem of reckless underbidding.

2.2.1.1. Given the automatic nature that is characteristic of this type of contracting, the rules governing its use are rather simple. Under Spanish law, once the Contracting Committee has opened the bids it can proceed in the same public act to present its proposal to the contracting authority in favor of the tenderer offering the lowest bid.

The contracting authority, for its part, confirms this proposal, making the definitive award, unless the Committee made its proposal in violation of the law, in which case the call for bids would become null and void, or unless said authority has grounds to presume that the lowest bid cannot be carried out as a result of excessive or reckless underbidding.

2.2.1.2. In effect, if the principle of awarding to the lowest bidder is applied inflexibly, awards could go to bids that are too low to guarantee a correctly executed project; experience has shown that if a contractor does not receive adequate compensation he will become careless with his work, causing delays, or try to use lower quality materials than specified, or try to make changes to the contract so as to obtain more lucrative prices for new units of work not included in the original contract.

In order to avoid these detrimental effects, different policy and legislative solutions have been suggested. For instance, it was proposed that no offer should be accepted if it
provides insufficient compensation -- this being defined as an amount that does not cover costs, with adequate construction methods and austere management, in addition to providing a reasonable profit -- but one must keep in mind that this is precisely how the government calculates the contract budget, which constitutes the benchmark against which the tenderers present their discounted bids -- each one as a function of its particular costs and profit expectations. Further, it bears mentioning here that in a system of open competition, prices must be set by the market. Hence there has also been support for awarding contracts to the bid that comes closest to the arithmetic mean of all the bids, or to the resulting amount after making random corrections to that mean. However, arguments against the first method state that it would be easy to manipulate the mean by tendering false bids designed to do expressly that; arguments against the second method say that this would turn the process into a lottery. So this problem cannot be considered definitively solved.

Under Spanish law, the General Contracting Regulations consider a discount to be "excessive" or "reckless" in principle when its percentage vis-à-vis the contract budget is at least 10 points above the arithmetic mean of the percentage discounts offered by the bidders as a whole. This criterion was tightened in the decree of 1 March 1996 insofar as the limit can be reduced to 5 units by decision of the contracting authority as long as that possibility is provided for in the specifications.

In cases of presumed recklessness, the contracting authority must request information from each of the bidders suspected of such as to their ability to fulfill their respective proposals, and seek consultation from a competent source. Based on the results, the award will go to the lowest bidder among those capable of carrying out their proposal, even if the bid mathematically warrants presumption of recklessness, although in this case the decision must be justified before the Advisory Committee for Public Contracts of the Commission of the European Communities if the call for bids was published in the Commission’s Official Journal.

Finally, an interesting new development in the 1995 Contracts Law provides that when a contract is awarded to a bid falling into said category, the bidder must give a definitive guarantee for the total cost of the contract -- when in normal cases the amount is 4%. It seems reasonable to establish a supplementary guarantee in this case, but it also seems excessive to make this guarantee equal the total cost of the contract when the government has already determined that the offer is viable.

As to the Court of Audit’s role in monitoring contracting by subasta, in normal cases it is limited to verifying that the contract was awarded to the lowest bidder; in cases of presumed reckless underbidding, it verifies that the procedures set forth by the Law are followed and pays special attention to the execution of the project so as to detect possible delays or modifications.
2.2.2. The *Concurso*. Cases warranting its use and how it works.

Since the *concurso* procedure has already been defined, we will merely reiterate that this method is designed to find the best of the bids tendered. In other words, in contrast to the *subasta*, which is designed to select the absolute cheapest bid, with the limitation imposed by the rule against reckless underbidding, the *concurso* is aimed at finding the most advantageous offer, taking into account not only economic factors but also, and above all, technical merits with respect to the ultimate goals of the project.

2.2.2.1. On its application Spanish law states, in general, that "contracts will be awarded by *concurso* when selection of the contractor is not made exclusively in favor of the lowest bid." However, this provision constitutes a true tautology, for instead of describing the general cases in which the *concurso* should be applied it merely contains a definition thereof -- for one could, in fact, define the *concurso*, as opposed to the *subasta*, as that form of award in which selection of the contractor is not made exclusively in favor of the lowest bid. So the cited rule basically states that the *concurso* will be used when the contracting authority does not wish to use the *subasta*.

Nevertheless, we must reiterate that in the eyes of the Court of Audit, the true criterion for using one form of award or the other lies in whether or not there exists a complete definition of the characteristics of the project and the conditions for its execution, and hence whether or not the economic factor is the only remaining point of comparison between bids. More simply put, the *concurso* should only be used in those cases -- which should not be too frequent in building contracts -- in which the object is not entirely defined by the government and must be completed by elements to be proposed by the tenderers. Therefore, the proper supervisory role for the Court of Audit is, generally speaking, to confirm that this is the case and why.

Given the above, we can now look at the cases in which Spanish law requires the use of the *concurso*.

When the government has been unable to draft plans or a contract budget beforehand, so these must be proposed by the bidders. This is an unusual scenario, not very common in practice, in which the design of the project and the execution thereof are contracted out together; this should be viewed with some reserve, demanding full justification of the reasons why the government could not produce these documents itself, as well as the grounds for not having separate contracts: one for the design of the project, which should be awarded by *concurso*, and one for carrying out the work, which can then be awarded by *subasta*. 
When the contracting authority considers that the definition of the project approved by the government might be improved upon through new technical solutions or by a reduced time frame to be proposed by the bidders. This reason for using the concurso is also logical; however, from the supervisory point of view, with respect to these "technical improvements," it would seem that even when the plans for a project are drawn up by the government’s experts, they can, like any human creation, be improved upon. For this reason the use of this clause should be limited, lest the concurso system become unduly overused. In those cases in which such improvements are foreseen, the specifications should make specific mention of the parts of the project that may be modified and the limits to those modifications, in addition to justifying why those improvements have not been included by the government. Furthermore, with regard to possible "reduced time frames" provided for in the plans, we feel that the degree should always be determined by the government as a function of the ultimate goals of the contract, lest this introduce a certain variability in the plans, which in turn could also lead to an undue overuse of this system.

When the government provides materials or auxiliary resources for the execution of the contract and requires special guarantees from the contractor that they will be used properly. This is a traditional scenario that occurs rarely in practice and does not require any special consideration.

Lastly, the concurso system should also be used for projects that require the use of highly advanced technology or the execution of which is particularly complex. These are clear and reasonable scenarios, as they demand that special attention be given to the character of the contractor, as long as the terms "highly advanced" and "particularly complex" are understood in their true sense.

2.2.2.2. With respect to the procedures for using this method of award, Spanish law states that the government’s particular specifications for the concurso must set forth "objective criteria" that can serve as a basis for award, such as "price, price escalation, time frame for execution or delivery, running costs, quality, profitability, theoretical value, aesthetic or functional characteristics, the availability of replacement parts, maintenance, technical support, among others." These criteria must be listed in descending order of importance, with an indication as to the relative weight attributed to each. Nevertheless, we must reiterate that except for very special cases, which must be fully justified, the aforementioned price escalation, time frame for execution, and even the aesthetic and functional aspects should be set beforehand by the government and be non negotiable. Moreover, we should point out that the due weighting of these criteria is fundamental; the Court of Audit has repeatedly criticized certain cases in which it felt that the price was given few points with respect to the total, as it has the fact that points for the price are frequently given not based on the actual amount, but rather on its relation to the average
price bid -- so it would seem that the point system favored not low offers, but reasonable ones.

Finally, once the deadline for tendering bids is reached, the Contracting Committee should proceed to open the bids, publicly, and, as is characteristic of the concurso system, submit them to the contracting authority together with its proposal, which should include the consideration of offers based on the criteria and point scale established in the specifications. The contracting authority, in turn, awards the contract, once the necessary technical reports have been considered, to the bidder that it deems best given the ultimate goals of the contract. Finally, it is the role of the Court of Audit to verify the soundness of the proposal, especially the application of the aforementioned criteria, and to make sure the award is in keeping therewith, or, should this not be the case, determine the cause of the discrepancy.

3. Special consideration of the negotiated procedure.

3.1. Concept and general characteristics.

This procedure is the successor to the previous system of direct contracting. It was introduced into Spanish law by the new Contract Law of 18 May 1995, which defines it by stating, "in the negotiated procedure the contract will be awarded to the business justifiably selected by the government, provided that it has consulted and negotiated with one or several businesses on the terms of the contract.

In addition, we can define it by the following distinctive characteristics:

— A virtually complete lack of advertising, except in a small number of cases of limited occurrence in practice, cases established for when the amount of the contract exceeds the Community’s "value threshold".

— Limited competition, as it requires consultation with only three businesses, and this only "when possible."

— Two-fold discretion for the government, both in selecting the businesses invited to tender as well as in selecting the winner from the bids presented, insofar as no objective criteria are established for determining the award.

— Lack of sufficient rules governing procedure, especially with respect to the means of presenting proposals and to maintaining confidentiality; the resulting gaps are filled through practices that are generally lacking in transparency.
These characteristics give the negotiated procedure clear advantages in terms of speed and efficacy, for there are no formalities in the proceedings, and there is full freedom to consider the individual characteristics of the competing businesses as well as the technical and financial merits of their tenders. Yet at the same time, this method also presents some serious disadvantages, such as its drastic limitations in terms of advertising and open competition (which, as stated earlier, are to be considered in the public’s interest in government contracting), its scant ability to seek out the lowest prices, as there is a lack of effective competition, and lastly, the mistrust and wariness citizens may feel because of the lack of transparency and the aforementioned two-fold discretion for the government in selecting the businesses to be consulted and in choosing a contractor.

### 3.2. Cases warranting its use.

As a result of the foregoing, this method is always used as an exception reserved for cases set forth by law. The use of this exception is always the object of close scrutiny by the Court of Audit, which interprets the conditions in their strictest sense.

With regard to the negotiated procedure without advertising, which is the most common type, the cases permitting its use are summarized by the following:

1.) **When a round of bidding is declared void due to lack of suitable bids**, i.e., if an ordinary procedure is initiated, be it open or restricted, but the contract is not awarded either because no bids were tendered or those tendered were not accepted. The new contract can be awarded with a price increase of no more than 10% over the original. The use of this exceptional award procedure is justified in this case because the attempt to contract using advertising and open competition failed. Although this does not happen often in practice, in the cases it has studied, the Court of Audit has been careful to ascertain the effectiveness of the failed call for bids and to ensure that the price limits for the new contract are respected.

2.) **In cases of urgency**, Spanish law permits the use of the negotiated procedure, bearing in mind that it is speedier than the ordinary methods, when due to unforeseeable circumstances not attributable to the contracting authority it is extremely urgent that the project be executed immediately.

This has been the most frequently invoked use of this exceptional procedure, and it is also the once scrutinized most closely by the Audit Office. First, it has insisted that the grounds for use must include circumstances that were absolutely unforeseeable, criticizing those cases which instead revealed a mere lack of foresight, such as the poor overall state of certain buildings (schools, barracks, courts, etc.), the increase in student population, the need to solve traffic problems, or the imminence of certain situations or events that are
perfectly foreseeable, such as Spain’s turn in the presidency of the European Community, which rotates among member countries, hosting the Olympics, which is decided well in advance, or the commemoration of certain anniversaries, etc. Secondly, the Court of Audit has also insisted that speed of execution of the project should be sought not in the tendering or award procedures, since not much time can be saved using one over another, but rather in speeding up the actual contracting process (there have been cases in which a contract was awarded by direct method because of an urgent situation, but the paperwork was delayed by close to or more than six months) and above all in speeding up the execution of the project itself, for there have often been delays in construction that would more than cancel out any time advantage gained in awarding the contract.

3.) When it is impossible to advertise the contract; the negotiation method may also be used for contracts which have been declared secret or classified, when current law requires special measures for its execution, or when the essential interests of National security must be protected.

In these scenarios it is evident that ordinary award procedures cannot be used, as they involve open publicity. However, the Court of Audit has on occasion had to censure the use of this procedure because there was no prior notice by the competent authority or because said essential interests of national security were not at risk, such as in the construction of police stations or headquarters.

4.) When it is impossible to call for competitive bids; this exceptional procedure may also be used for projects which can only be carried out by a given business owing to its specific technical or artistic requirements, or for reasons having to do with the protection of exclusive rights.

The reason for excluding ordinary award procedures is again clear, as they require open competition. However, this case is rarely seen in practice, except for projects of an artistic nature, which must be expressly declared as such by the competent entities, and then verified by the Court of Audit.

5.) When the cost of the project is low; projects with a budget below 5 million pesetas [about 33,000 US dollars] may also be assigned by direct contracting. The reason for this allowance lies in the rigorous formalities and the complicated bureaucracy involved in ordinary award procedures, which make it impractical to use them when the project is not of a certain magnitude. It is precisely for this reason that we feel that the aforementioned limit set forth in the new Law, lowered from the 50 million pesetas indicated in the previous law and even in the new law’s own draft version -- is too low, and may unduly multiply the number of announcements published and increase the bidding for very minor projects.
Furthermore, one might observe that this quantitative limit can in fact be circumvented by splitting up an overall project, which due to its total cost could not be assigned by means of this exceptional procedure, into several partial projects of lower cost to be contracted separately. Hence, one of the goals of the Spanish Court of Audit is to look for possible splitting of this sort whenever it observes that several contracts of similar content or ends have been awarded to the same business around the same time. It has found this to be the case on several occasions in the contracting of adjoining stretches of a single road, similar projects on different floors of a single building, etc.

6.) When the project complements a previous one, Spanish law also allows for direct contracting, although only with the same contractor that did the principal project and at the same price as the principal contract or, if necessary, prices fixed to the contrary. It is an essential requirement that the need to carry out these complementary projects have arisen as a result of unforeseeable circumstances and that they cannot be separated technically or financially from the original project or, if they could be separated, that they be strictly necessary for its later stages.

These complementary projects, however, despite being permitted by law, actually contradict the principle of an undivided project, especially when they are not the direct result of unforeseeable factors but rather the result of pure lack of foresight. Moreover, theoretically they are very close in nature to ‘additional work that modifies the original,’ and in practice they are confused; this procedure is used when additional projects have already been approved up to the limit of 20% of the original budget, and going over that limit would constitute grounds for cancellation of contract. For these reasons the Court of Audit has repeatedly criticized this practice, particularly when it has observed the aforementioned lack of foresight in conjunction with additional projects and, as it often happens, the total or partial completion of these projects without analysis of and approval for the expense.

7.) When there is a repetition of work done previously, Spanish law, finally, permits direct contracting with the same contractor who carried out the original project, as long as: the first one was awarded by ordinary procedures, whether open or restricted; the new work conforms to a base project, the possibility that this would occur was announced when the original was put out to tender, and its cost is calculated and included in the total contract price used to determine whether the contract falls within the value threshold for advertising. This option for direct contracting must be taken advantage of within the three years following the awarding of the original contract.

Because this was a new aspect of the law of 18 May 1995, there is a lack of experience in supervising this mode of use of the negotiated procedure.
3.3. The Court of Audit’s critique of direct contracting in practice.

In addition to the previous criticism of the cases in which this exceptional system may be used, the Court of Audit has severely censured other aspects of how it works in practice.

— For instance, it has repeatedly complained of how little, in general, competition has been encouraged in this system, because normally no more than the legal minimum of three possibly interested businesses have been consulted. This number has at times been even lower in practice, either because one of the businesses contacted did not answer or declined the invitation, or they came up with bids that exceeded the contracting budget, in which case the estimate could not be considered, or, more rarely, because businesses were contacted that did not qualify as National public works contractors, in which case a contract with them would not be valid.

— There has also been a frequent failure to document the consultations made in said requests for bids, as well as a lack of registered entry stamps on bids received by the authority. Similarly, there has been a failure to justify why these consultations have been directed toward certain businesses, especially in those cases, normal in practice, in which there are many businesses that qualify for carrying out the projects. These issues are of particular importance in the negotiated procedure, in contrast to the ordinary procedures, where advertising, the open nature of the call for bids, and the transparency with which bidding takes place rule out such problems.

— Further, we have seen that in a considerable number of contracts awarded by this special procedure, especially in urgent cases, the dates the bids were received were earlier than the dates of the corresponding analysis and approval of cost; this discrepancy implies that these bids were invited before the government had officially decided to enter into a contract and before the legal and economic conditions of that contract were approved. In some rarer cases it was even discovered that the aforementioned bids were dated prior to the review and technical approval of the project involved -- here the previous problem is magnified by the fact that bids were invited when an approved project did not yet exist and the technical and economic specifications of the object of the contract were not yet defined.

— Last, with respect to the execution of the contracts mentioned thus far, it has also been discovered on occasion that the object of the contract was totally or partially completed before the cost was audited by the Office and approved by the contracting authority, so it had to be validated by the Council of Ministers. Such validation does not imply approval of this irregular proceeding, it is merely the required administrative procedure enabling the government to assume the financial responsibilities derived from said total or partial execution of the object of contract.
4. **Definitive award. Notification and publication.**

The awarding of a contract, in its strictest sense, occurs when it is entered into. It is the moment of inception, at which, as we stated at the beginning, once the government accepts a given tender, the parties come to terms, and the contract is signed, making it binding for both.

On this point, Spanish law requires that regardless of the procedure used, the award by the competent contracting authority - - unless it is a Contracting Board --must be preceded by a proposal from the Contracting Committee, which may request as many technical reports as it sees fit; the contracting authority must justify its decision if it does not assign the contract in accordance with that proposal. The purpose is to involve a group, whether a Board or Committee, in the award process, as it is reasonable to assume that the decision it adopts will be more objective and less subject to external influences than that of an individual actor.

Finally, once a decision has been reached, all the participants in the bidding must be notified thereof, and each rejected bidder who requests it must be informed of the reasons why his bid or proposal was not accepted, and of the aspects of the winning bid that were decisive, unless it is one of the aforementioned cases in which the negotiated procedure was used for reasons of confidentiality or national security, or if disclosing this information were against the public interest or could harm the legitimate business interests of other firms. Also, as a last condition, the contract must be formalized as a government document within a period of 30 days from the date of award, and must be published in the official gazette of the corresponding level of government -- European Community, National, or regional -- within 48 days of said date.

The role of the Court of Audit at this stage of contracting predominantly involves formalities, being limited to verifying the qualifications of the parties signing the contract, ensuring that the price, deadline, and other conditions stipulated therein correspond to those established in the original specifications and any variants introduced through proposals from the bidders, and when accepted by the government, make certain that the winner effectively gives the definitive guarantee in the proper amount, and verify that all interested parties have been notified and that the award has been published in the appropriate official gazette.

**Conclusion**

Lastly, as proof of the always current nature of the issue of contractor selection, we could not resist the temptation to quote from a letter sent on 17 July 1683 by the Commissioner
of Fortifications, VAUBAN, to the MARQUIS DE LOUVOIS, Minister of War to
LUIS XIV of France, as it expresses with great force and clarity the following:

"There are several projects of recent years which have not been finished and will never be
finished; all this, Monseigneur, because of the confusion caused by the reductions on your
building projects, for it is certain that all these breaches of contract, broken promises, and
renewals of contract do nothing more than attract as contractors all the wretches that don’t
know what else to do, the idle and ignorant, and scare off all those who have money and
are capable of carrying out a contract. And what is more, this delays and makes more
expensive projects that are worse than awful; these reductions and cheap contracts so much
sought after are imaginary, for a contractor losing money does the same as a drowning
man: he will grab hold of anything he can get his hands on. Now for a contractor, grabbing
anything he can get his hands on amounts to not paying the merchant from whom he
acquires materials, underpaying the workers he employs, loafing whenever possible, using
only the worst materials, bungling everything, and always begging for forgiveness because
of this or that. Enough is enough, Monseigneur, hold up your end of the bargain as you
expect the contractor to hold up his, but above all, never accept a contractor who is not
solvent and intelligent. Otherwise, you will never see your works completed, while they
will cost you one-fourth more than they are worth, bring greater trouble to you and all
others involved, and you and they will end up nothing more than victims."
4. Austria:
Audit of the execution of projects, orderly delivery and acceptance of commissioned works, as well as billing

During project implementation, the aspects of

- financing
- project organisation
- planning
- award of contracts

are fundamental milestones before addressing aspects such as

- implementation
- acceptance
- billing
- operation/use

When auditing the implementation of construction works, the Austrian Court of Audit intends to examine how construction projects were implemented by the public works agencies as to:

- economy, efficiency and effectiveness,
- regularity and compliance with regulations and pertinent decrees issued by the central government agencies, with regard to
- managerial and economic/technical aspects.

As the case may be, the audit should identify all measures necessary to avoid impending damage or loss, or to remedy any damage or loss which the Republic of Austria might have suffered.
As a general rule, all forms of public works may be audited, provided they fall within the Austrian Court of Audit's jurisdiction.

1. **Basic requirements for audit**

An audit of the above aspects will only make sense if the legal and technical requirements for the construction works were first identified.

1.1 **Legal and technical contractual arrangements**

First the auditor must know the final and valid execution plans and all official notices (including applications submitted). Also, all authorisations by the central government agency must be made available to the auditor.

Furthermore, the Conditions of Tendering (competition), the legal and technical contractual bases (such as the bill of quantities, the general and specific legal and technical contract terms, applicable norms, statements of tenderers, and a protocol on the commencement/handing over of works), as well as the schedules and cost plans must be submitted.

1.2 **Economic framework**

The economic framework for the works is then determined on the basis of this documentation. The documents on co-tenderers (comparative price schedules) provide information whether and to what extent the construction works were proposed to the contractors in a competitive tendering process. At this level, it is also possible to identify any speculative price calculations for certain items with the help of the detailed calculations (calculation sheets) submitted together with the tender bids.

1.3 **How pricing impacts construction works and the Court of Audit's audit approach**

Speculative pricing often has a more serious effect on construction and billing than technical limitations, as the contractors will generally attempt to enforce their speculative prices. Often it is found that contractors having offered services at under-cost prices show little enthusiasm to perform, while those services which are offered at higher prices are frequently implemented and then billed.

Moreover, it has been observed that tenderers submitting a tightly calculated price quote often try to achieve a higher price during final settlement. This gives rise to a whole range of different practices, such as attempts to alter performance in order to achieve new price
agreements with the builder-owner, use of less costly designs, exploitation of the builder-owner's subsoil risk\(^1\) ("careless workmanship"), or even to criminal practices such as the use of inferior qualities and billing of non-rendered work, etc..

In building construction, it is important to look at how the agencies responsible for public works handle subsequent user alterations, and how these alterations affect performance and costs.

2. **Audit of execution and acceptance of works**

2.1 **On-going monitoring by the owner-builder's agents**

During the construction works, the execution of works is primarily monitored by the government's supervising officials and by independent commissioned civil engineers.

On-going monitoring is especially important in civil engineering, as the orderly execution of major phases of construction can only be determined on site the moment when performance is rendered. This applies, for instance, to foundation works (including the surveying of the foundation depth), drainage and insulating works, technical installations, reinforcement of bridges and buildings, as well as retaining measures in tunnelling (tunnel arches, anchors, shotcrete), which become invisible once the shotcrete covering and the interior concrete rings have been put in place.

2.2 **Third-party quality checks**

Conforming with contractual provisions, a number of quality-assurance measures are conducted, e.g. checking the degree of compaction with raised embankments (settlement behaviour), materials testing (frost resistance, etc.), sampling of concrete at placement and after placement (strength of shotcrete, thickness and quality of asphalt), asphalt tests at the production plant etc. With the exception of production plant tests, these checks - which build on the samples drawn on site - are then analysed by independent commissioned testing institutes or by the builder-owner's own testing institutes and laboratories, and submitted to the building supervisors for further action (remedy of defects, reduction of final bill for defective quality).

\(^1\)Generally, the builder-owner is held to defray the additional cost if the risks arising from the uncertain quality of the subsoil materialize
2.3 Audit by the Court of Audit

2.3.1 Review of activities of the local supervisors

For reasons of methodology, it is important to look into the activities of the local supervisors to be able to make an evaluation of how a building project is implemented in overall terms (realisation phase). In order to assess the efficiency of the concomitant checks and controls, it is important to determine whether and to what extent supervision had a sustained effect on the works being completed without deficiency. (This is true in particular for the audit of the billing process outlined in item 3).

In its audits, the Court of Audit verifies whether these tests and controls were performed according to contract (frequency, results, action taken by the local supervisors), and looks into the documentation (job records, daily reports, meeting protocols, photo documentation etc.). In this audit, special attention should be given to any particular interests the persons commissioned to perform tests and controls may have.

2.3.2 Quality controls by the Court of Audit

The Austrian Court of Audit will only proceed to conduct additional quality controls if there is reasonable doubt. During the audit of a roadworks project for instance, the auditors' first assessment of the situation led them to contract the services of an expert civil engineer and licensed surveyor to re-measure cutting profiles\(^1\) (road profiles, quantities). Ultimately, this measure led to a correction of the final account to the benefit of the builder-owner.

In another case, the auditors suspected that technical measures to stabilise road embankments in the construction of a new highway had not been implemented as billed and at the specified quality level. In agreement with the local supervision and the builder-owner, the Court commissioned subsequent earth-moving works with light apparatus. This simple digging corroborated the suspicions which had been raised at the first on-site inspection. As a consequence, bills were significantly adjusted and the final bill, which had already been checked by the supervisors but not yet settled, was withdrawn. In the end, criminal prosecution was instituted.

In building construction, quality standards are examined with regard to optimising construction, design and profitability and with a view to follow-up costs.

\(^1\)comparison of billed and actual tasks by re-measuring true size of profiles
3. Audit of billing

The Court of Audit devotes considerable attention to the audit of the billing process.

3.1 Contractual compliance

The auditors examine the submitted bills as to contractual conformity on the basis of the specific contract which underlies the project (including the explanations gathered from the briefing of tenderers in the assessment of tender bids). Tasks must be billed under the items provided for and at pertinent unit prices.

3.2 Development of quantities

An in-depth analysis is conducted of the development of quantities from planning to tendering and billing. Important aspects to look for are the quality of planning (including probes of the building soil), and whether the tender quantities were calculated accurately, especially with a view to speculative items.

3.3 Rightfulness of subsequent claims

3.3.1 Legal/material entitlement to claims

The auditor studies the causes for subsequent claims and how they were handled by the local supervisors or the builder-owner, in particular whether there was sufficient reason to deviate from the existing contract. Suggestions made by the contractors to amend designs that were tendered and commissioned generally give rise to subsequent claims. In an optimum scenario, these alterations are offered at the same price as the original design.

As far as the material justification is concerned, any facts that may have given rise to a subsequent claim must be evaluated by means of the contract and the documentation on the progress of works, as well as by studying the geological building conditions. In one case, the auditors had to reconstruct the meteorological conditions with the help of the national meteorological service in order to verify claims that a protracted period of frost had created severe problems for the excavation works.

3.3.2 Amount of compensation

The audit should not only examine the material justification for subsequent claims, but also the amount of additional compensation that was awarded on the basis of the detailed
calculations. From the actual course of work and from the builder-owner's on-site records the auditors will calculate added complications or savings for comparable specified items.

Increasingly, we have been observing a trend for builder-owners and also contractors to have their claims acknowledged through expert opinions. As far as the Austrian Court of Audit's audit work is concerned, the auditors will have to examine or assess any potential bias these experts may have, their professional competence, and whether the experts were presented with the full facts to perform their assessment.

4. **Handing over of works and follow-up costs**

The handing over of the works, the handling of warranty claims, further maintenance and repair, as well as the optimisation of follow-up costs are important aspects. Especially in building construction, we find that deficiencies frequently occur in test operations, in the hand-over of documentation and plans, in maintenance services during the warranty period, and in the anticipation and identification of follow-up costs.

For defects occurring after hand-over, the Court of Audit will examine how questions relating to fault, liability and defrayal of costs for necessary remedies were handled. Considerable importance is attached to the position of experts in evidence-gathering.

5. **Conclusion**

In auditing construction projects, the Austrian Court of Audit pursues the following aims:

- **ensuring due and proper execution of works**
- **being a partner for governmental public-works agencies and offering assistance**
- **minimisation of loss/damage (correction of settlements)**
- **general/special preventive effect**

The possibilities to influence costs shrink as a project progresses. Therefore the financial impact of audit findings will largely depend on the timing of the audit, the quality of settlements, the contractual framework, and on the influence exercised by project management.
5. United Kingdom:

Estates management audit guides and case study on the New British Library

<table>
<thead>
<tr>
<th>Estates management area</th>
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<tr>
<td>• audit of the government estate</td>
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<tr>
<td>• Property Services Agency</td>
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<tr>
<td>• gradual devolvement to departments</td>
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<tr>
<td>• specialist value for money auditors</td>
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<tr>
<td>• devolvement to line auditors</td>
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<tr>
<td>• audit guide modules</td>
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</table>

The government estate includes modern offices, historic properties, hospitals, schools, colleges, prisons, military land and buildings. It is worth over £24 billion.

Since 1988, the central Property Services Agency has been privatised and departments have gradually assumed responsibility for their buildings.

Many aspects of property management are tested for the Private Finance Initiative.

Property management is specialised and departments need “intelligent client” capability to use professional services.

Estates Management Area of UKNAO specialised in value for money audit in this field. The auditors were not property people but gained expertise via training and experience. Also made wide use of consultants, so we needed intelligent client capability too.

After responsibilities went fully to departments, the audit went back to the line auditors. There was a need to record and make available the accumulated experience and expertise of our Area.

Therefore we developed an audit guide in nine modules. End of life Occupation Acquisition Strategy
Estates Management Area used the life cycle model to develop our Area audit strategy.

For each stage of the cycle, we

— identified the issues which a value for money examination of estates management might cover;
— analysed the significant risks to value for money.

We used this structure to identify and design our value for money studies.

We produced audit guide modules related to this structure. These gave auditors:

• some narrative - not too technical
• risk analysis
• NAO reports published since 1990
• bibliography

I shall go on to discuss each of the four stages of the cycle, setting out the audit issues and identifying the guide modules relevant to that stage.
Strategy

<table>
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<tr>
<th>Issues:</th>
<th>Audit guide modules:</th>
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<tr>
<td>location</td>
<td>2. Estate strategy</td>
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<tr>
<td>type of building</td>
<td>3. relocation</td>
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<tr>
<td>estate rationalisation</td>
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<td>option appraisal</td>
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Estates strategy is concerned with how organisations identify and appraise their property needs.

A good strategy will ensure the organisation has suitable property in the right locations when it is needed and at an affordable cost.

Estates strategy is unlikely to provide sufficient material for a whole value for money study unless there are special circumstances, eg:

— a large programme of estate rationalisation;
— a major relocation;
— a major Private Finance Initiative project.

It is more likely that estate strategy issues may be included as part of a wider examination. For example, we have usually considered the adequacy of an organisation’s estate strategy in the studies we have done of space management issues. Also, we would expect any decision by a department to relocate any of its functions to be the result of a strategic process, and thus would consider this in our relocation studies.
### Acquisition

<table>
<thead>
<tr>
<th>Issues:</th>
<th>Audit guide modules:</th>
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<tr>
<td>purchase of freeholds</td>
<td>4. Property acquisitions</td>
</tr>
<tr>
<td>leasing</td>
<td>5. Major capital works</td>
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<tr>
<td>major works</td>
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<tr>
<td>contract strategy</td>
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<td>design</td>
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<td>project management</td>
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Acquisition is a high risk activity because it is expensive, it can create a long term commitment, and departments may not have the necessary expertise in the property market or in construction.

Departments may need to acquire property for a number of reasons, eg relocation, changes in their operations, developments in technology, expansion or contraction of their business.

They may acquire a building by purchase or by lease.

They may build a new building, or carry out major works on an existing building.

Major capital works are material by value - UK government bodies spend £6 billion a year on works. They are inherently prone to risk, because:

- in most cases they are one-off designs;
- professional teams assembled for the job are unlikely to have worked together before;
- they take several years, during which time clients will have to manage substantive changes in their requirements;
- there has been a climate of distrust in the UK construction industry.

Major capital works has been an important area for UKNAO audit - eg the new British Library on which we reported in 1990 and 1996.
UK government departments spend an estimated £3 billion a year on the running costs of their estates - rent, rates (property taxes), maintenance, energy and utilities, cleaning and security.

Risks arise because departments have recently taken on increased responsibilities, particularly for maintenance, for matters where they have little experience. Also, such responsibilities tend to be delegated to low levels of the organisation. This can lead to

— excessive running costs;
— undermaintained buildings, inefficient in energy use;
— underused space.

A premises audit covers all these issues, and can identify savings in costs and in space.

NAO experience has been that the most significant savings are gained through the efficient management of space, so our more recent studies have tended to focus on this.

On maintenance, we have done reports which concentrate on maintenance, but also included maintenance in reports on other estate management issues, or on other operational issues.
<table>
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<tr>
<th>Issues:</th>
<th>Audit guide modules:</th>
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<tr>
<td>disposal methods</td>
<td>9. Disposal of property</td>
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<tr>
<td>timing of sales</td>
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The UK government estate is subject to frequent change. Operational needs can change, expand or reduce. There may be technological changes, or changes in the machinery of government.

Once the need for disposal has been properly identified, the main risk to value for money is that properties may be sold too cheaply.

Other risks include:

- the costs of sale may be too high;
- sales may take too long;
- departments may fail to identify surplus property;
- sales may be poorly timed with regard to market conditions.

UKNAO studies have covered:

- the sale of one property;
- an organisation’s programme of property disposals;
- sales of property assets as part of a report on a privatisation.

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New British Library

This has always been a controversial building.

Its design has been widely criticised.

A vociferous group of readers were unwilling to accept that they had to lose the use of their old reading room.
It has taken a long time to build and cost a lot more than intended, but does not provide everything that was envisaged at the start.

<table>
<thead>
<tr>
<th>New British Library</th>
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<tbody>
<tr>
<td>• £511 million</td>
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<tr>
<td>• 108,000 square metres</td>
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<tr>
<td>• 300+ kilometres book storage</td>
</tr>
<tr>
<td>• reading rooms with 1,206 reader seats</td>
</tr>
<tr>
<td>• entrance hall and piazza</td>
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<tr>
<td>• 3 exhibition galleries, auditorium, meeting rooms, conservation workshops, photographic and reprographic centres, restaurant facilities, office accommodation.</td>
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</table>

The British Library is a public body, most of whose income is provided by annual grants from the Department of National Heritage (now the Department for Culture Media and Sport).

Its function is to serve scholarship, research and enterprise, promoting the advance of knowledge through the communication of information and ideas. It consists of a comprehensive collection of books, manuscripts, periodicals and other recorded matter. It is entitled by law to receive a copy of every UK publication.

The new building is sited at St Pancras in central London, near to the University and to the British Museum, which used to house a large part of the Library.

The books are kept mainly in huge basements, in a controlled environment.
Origins of the project

- 1960s or earlier
- site purchased in 1976
- proposals for 3 phases in 1977
- construction started in 1982

There had been proposals for a new building since the 1960s or earlier. In 1976, following widespread public opposition to the site originally proposed, the government bought land next to St Pancras railway station.

In late 1977 Ministers agreed design proposals for a three phase construction, but made no commitment to fund any of it.

In 1978, Ministers gave approval for part of the first phase to start. This was expected to be occupied by the end of the 1980s.

In 1979, there was intense pressure on public spending and funding for the project was reduced. But work started on the foundations in April 1982.

NAO report 1990

- uncertainties about design and funding
- very small increase in reader seats
- no budget or fixed timetable
- cost increases
- poor management
- government commitments in 1991, to meet all handover dates within a budget of £450 million

The final configuration of the building was not settled until November 1988. This gave the British Library their key requirements, but was on a much less ambitious scale than originally envisaged. In particular, the number of reader seats increased by only 7 per cent.
From 1978 to 1988 the progress of the project was governed by the annual funding made available.

There was no budget for the project until 1988, when cash limits were set totalling £450 million.

The cost of the first phase had risen from £115 million at 1979 prices to £300 million cash. This was an increase of 20 per cent in real terms, but the position was much worse because of construction price inflation.

Management was weak - the Steering Committee did not meet for over three years, the client department had little authority, and the central Property Services Agency, then responsible for the construction, provided inadequate information.

The Committee of Public Accounts (PAC) was very critical. In response to their report, the government undertook to make improvements in management, and to complete the building by 1996 within the budget.

<table>
<thead>
<tr>
<th>NAO Report 1996 - reasons for second study</th>
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<tbody>
<tr>
<td>• missed handover dates</td>
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<tr>
<td>• budget increased by £46 million</td>
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<tr>
<td>• disputes between the Library, the Department and the construction manager</td>
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<tr>
<td>• technical problems and delay in dealing with them</td>
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</table>

We monitored the project regularly, in view of its materiality, public interest and allegations of problems on site.

A study was proposed in our 1994 strategic plan, but only as an alternative. Then the profile was raised because the Library construction timetable slipped, and there was a critical report by another select committee of the House of Commons.

We planned a short study, but our initial work in late 1994 revealed there were big problems with the project:

the building had missed all the handover dates and the planned public opening of the first phase. No revised opening dates had been announced.
the budget had increased from £450 million to £496 million

there were disputes between the British Library (the users), the Department of National Heritage (the client department), and the construction management company (responsible for planning and supervising the works contractors)

there were technical problems with the bookshelving and the electrical cabling

there were delays in dealing with these problems, and there was no programme to complete the building.

<table>
<thead>
<tr>
<th>NAO Report 1996 - approach</th>
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<tbody>
<tr>
<td>• team of 2 based on site</td>
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<tr>
<td>• file review and interview</td>
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<tr>
<td>• tours of the building</td>
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<tr>
<td>• evaluation of project management and budgetary control systems</td>
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<tr>
<td>• employed project management consultant</td>
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The full team consisted of an audit manager and three examiners. But the major part of the fieldwork, on construction issues, was done by two examiners who were based on site for about three months.

We examined files and other documentation belonging to the Library, the client department, the construction management company, and the consultants employed by the department (architects, engineers, project managers etc). We also interviewed key members of staff from all these organisations.

For our evaluation of systems we employed a distinguished project management consultant. He had worked recently as project manager on public projects in the world of the arts, and which used a similar contract strategy to that used for the Library project.
Completion of the first phase (1A) had slipped from March 1993 to November 1995.

The major cost increases had occurred on Phase 1A. They were attributable to the delays in dealing with technical problems, not the direct cost of putting them right. Extra costs included £50 million for managing and maintaining the site beyond March 1993, and £42 million to contractors for delay and disruption to their work.

Bookshelving (290 km of shelving)

the bookshelving problem was identified in July 1991 and there was no agreement on the solution until August 1992 (1+ year)

Electrical cabling (3,000 km of cable)

the cabling problem was foreseen in December 1989, identified in June 1993, fully scoped in late 1993, and the solution agreed in August 1994. It delayed the completion of Phase 1A by 21 months.

Disputes between the Department and the Library contributed to delays.

Project management was too complex; the contract strategy was badly implemented; responsibilities were not clearly defined for quality control.

The second phase was managed on a totally different basis. There were no cost increases and it was completed on time in 1996.
### NAO Report 1996 - findings

<table>
<thead>
<tr>
<th>Lessons for other projects:</th>
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<tbody>
<tr>
<td>• one client</td>
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<tr>
<td>• settle performance and specification of systems early in design</td>
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<tr>
<td>• fee incentives</td>
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<tr>
<td>• quality assurance</td>
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<tr>
<td>• commercial deals</td>
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We drew out some key lessons for future projects, which would be of use to all departments and other government bodies undertaking construction projects:

- having effectively two clients carries a high risk of disagreement and indecision
- the performance and specification of complex systems should be settled early during design. Design audits should be undertaken to ensure that design concepts and detailed designs meet the project objectives
- fee arrangements for architects and other professional consultants should provide financial incentives to complete projects on time and within budget
- clients should ensure that their contractors have adequate quality assurance systems in place before construction begins. Quality control, by reliance on the inspection of completed work, will tend to identify defects too late
- where contracts are in difficulty departments should consider making commercial agreements with their contractors to minimise the costs of delay.
The Committee of Public Accounts (PAC) held a hearing on our report in June 1996, one month after publication.

Interest was heightened because the Department announced yet another increase in the budget - by £15 million, to £511 million - five days before the hearing.

The session went on for nearly three hours - which was unusual.

— The Committee produced their own report in October 1996. It was highly critical, particularly in its conclusions that
— project management was too complicated and as a result it was impossible to attribute responsibility for the project’s shortcomings
— the disputes between Department and Library were damaging for the project and the taxpayer
— quality control was weak and remained so for years
— budgetary control systems were unsatisfactory and left the Department poorly placed to resist claims on their contingency funds, which were on occasions overdrawn.

In summary the Committee concluded that this was a model of how not to manage a construction project. It looked to the Treasury to ensure all government departments and other bodies were made aware of the lessons from this project.
IV. REPORTS OF THE WORKING GROUPS

1. Report of Working Group 1
   (Report of the Working Group in English)

Objectives

Large investments for long-time public works projects are made by all the countries for ensuring infrastructure necessary for economic growth and a betterment of living standards of the public. The audit of public works projects, is, therefore important to ensure economy, efficiency and effectiveness in their execution and compliance with norms of financial propriety, social appropriateness and environmental sustainability.

Public works are cost intensive and must satisfy prescribed criteria for adequacy of economic/financial return before these can be approved for execution. This also involves quantification of cost and anticipated benefits.

General Principles

I) Audit Mandate:

a) Should be expanded to include "Performance Audit / Value for Money Audit" by all the SAIs.

b) SAI should have access to technical reports and construction site for requisite inspection.

II) Audit Planning:

With the limited manpower and financial resources, and also to be cost-effective, the audit plan should determine the priorities of the projects with reference to the risk assessment factors associated with the projects.
III) Document Audit Procedures:

Audit manuals for the "Guidance of audit teams" should be comprehensive and updated regularly. To ensure objective comments, there should be full documentary evidence in support of each audit remark.

IV) Reporting of Audit:

After detection of important audit findings e.g., failure in planning, the findings should be immediately brought out in a separate audit report to invite the attention of the executive/public for suitable remedial action well in time without linking it with annual financial audit.

V) Timing of Audit:

Presently, SAI mostly conduct audit midway or on completion of the project. For works other than the standard types like normal roads, staff quarters, conventional bridges, minor irrigation projects, audit may review at the post-planning stage before the award of the contract. This would apply to technically complex projects with huge investments over a long period of time and needing co-ordination with other government agencies for timely and full exploitation of benefits of project investment.

Detailed Audit Procedures

I) Audit of Planning:

a) whether the assumptions forming the basis of project selection are realistic and the calculation of social-cost benefit analysis have been made correctly;

b) whether the feasibility study was strictly conducted in the manner prescribed;

c) whether the feasibility reports took account of the existing facilities, maintenance and operational requirements and environmental impacts;

d) whether the technical authority has certified the design or concept of the project to be the least-cost solution which could be checked by audit;

e) whether the specifications of various items of works are economical and consistent with the quality;
f) whether the maintenance cost has been realistically calculated and a system is in place to recover or finance these expenses so that assets created do not go to waste with unattended wear or tear necessitating heavy replacement cost subsequently;

g) for private sector participation, whether the arrangement is based on thorough analysis of risk sharing, transparent terms, best use of public resources, quick and equitable social benefit and accountability of the private participants to the beneficiary public;

h) whether regulatory mechanisms have been set up to monitor compliance by the partner agency of the arrangement and whether the regulator has requisite competence to arbitrate tariffs for the user and performance by the private party.

II) Real Estate Transactions:

a) whether it makes an economic sense with reference to the cost prevailing in the market;

b) whether the cost bears proper relation to the benefits from the project (efficiency);

c) whether it was suitable for attaining the intended public use consistent with environment norms (effectiveness);

d) whether proper records are kept of the assets acquired;

e) timely acquisition of land for scheduled completion of project.

III) Audit of Procurement

a) Tendering procedure should be transparent and method of selecting the successful bidder should be specified in the tender documents;

b) in the system of pre-qualifying the bidders, the eligibility criteria should be clear and include financial strength, past performance, registration as an approved tenderer; reasons for rejection to be seen;

c) whether non-price criteria such as the timeframe for delivery, quality, maintenance, cost and the weights attributed to them are specified in advance for evaluation and are evaluated by an impartial board;
d) as a general rule, negotiation without open bidding should be discouraged. Such cases should be examined for adequate justification for adopting this procedure and any evidence of its abuse.

**IV) Audit of execution**

a) whether the physical progress is commensurate with the expenditure incurred and the time frame as per contract;

b) whether supervision over the contractors work is adequately prescribed and performed;

c) to visit the site with clear objectives and appropriate technical assistance, if required.

d) to satisfy that adequate quality assurance systems exist;

e) to check that variations in the scope of work contract are properly authorised, priced and documented.

f) to check that invoices confirm to the contract in respect of the items and the rates therein;

g) examining the reasons for claims for extra payment by contractors for work and whether paid with proper authorisation;

h) review the final bill prior to payment and ensure settlement of all outstanding matters before the final acceptance of the work.

**Limitations Affecting SAIs**

Commonly noticed limitations are:

- lack of power to recruit staff
- lack of adequate staff
- lack of technical expertise
- lack of international standards for technical audit
- lack of computer literate staff to conduct audit of computerized accounts / reports.
Recommendations

- SAI should have powers to hire technical experts preferably from an independent board or institute of engineers out of a panel of experienced and reputed names;

- courses in "Training Programmes" to provide abroad appreciation of technical terminology issues and risks should be conducted by SAIs. Also, auditors should be attached to technical departments for exposure to technical aspects;

- exchange of information on a regular basis on type of audit findings;

- regular consultation with technical audit wing of the public works department, wherever these are in existence;

- the audit report should contain recommendations for a specific advice for administrative action or re-examination of suitable alternative by the executive;

- for established cases of overpayment or loss on the part of an individual officer, audit should refer such cases for administrative investigation without waiting for PAC report.
2. Report of Working Group 2
(Report of the Working Group in French)

INTOSAI
Auditing of public works
French Working Group

Introduction

The French Working Group of the UN/INTOSAI Seminar on the Role of Supreme Audit Institutions (SAIs) in Auditing Public Works presents the conclusions of its work.

This report comprises an introduction, an account of the principal subjects taken up, an analysis of the objectives of auditing by the SAIs, an enumeration of conditions conducive to an optimum result of audits, and conclusions.

The Working Group was not able to discuss all the questions elaborated upon during this Seminar. Our attention focused on: the auditing objectives of SAIs, their independence as a precondition for the quality of their work, expected developments in their tasks, improving the impact of audit results and the development of a methodology for reducing auditing costs.

Auditing objectives of the SAIs

Remarks:

In the field of public works, the role of the SAIs focuses first of all on verification that the applicable legislation has been complied with. Such verification is, however, inadequate for making sure that funds have indeed been employed in the interests of the users and that the costs are compatible with the use to which the infrastructures are put.

Recommendations:

- The SAIs must first of all establish that national legislation has been complied with in the committal and disbursement of public funds.
- The SAIs must also evaluate whether budgetary appropriations have been used for the purposes for which they were granted and whether the level of funds allotted to the infrastructures is in accordance with and appropriate for their use,
– The SAIs must analyse whether the operating costs of the infrastructures are compatible with their use,
– On the basis of the findings made during the audits, the SAIs must be authorized to propose any measures for improving internal audit systems, including amendments to legislation, or to propose the distribution among government departments of detailed directives concerning project management, the use of infrastructures, etc.,
– The SAIs may not, however, interfere in the management of the projects and cannot replace the administration in defining the objectives pursued (verification of expediency). This limitation of the objectives cannot, however, lead to restricting the scope and objectives of auditing. The concrete content of the notion of expediency is exclusively a matter for Parliament.

Independence of the SAIs

Remarks:

There are limits to the extent of the tasks or objectives of the SAIs. It follows that the principle of the exhaustiveness of audits is no longer guaranteed. Owing to de jure or de facto restrictions, the SAIs therefore cannot give an assurance that the law has been complied with in the case of all work or contracts financed out of public funds, and that the funds have been used for the purposes for which they were granted.

Recommendations:

– The tasks of the SAIs must cover the entire process of management of the work; the SAIs can therefore investigate the preliminary studies, the preparation of the specifications and the computation of quantities, the award of the contracts, their execution, quantitative and qualitative acceptance procedures, the start-up of the works, their utilization, putting into service and dismantling or decommissioning,
– The SAIs must have full liberty to specify the time at which they wish to undertake the audit; that is to say, either at the time of preparing the projects and studies or of awarding the contracts or after the start-up of the infrastructures,
– No instructions may be given to the SAIs regarding determination of the projects to be audited or definition of the auditing objectives or regarding the investigation methods,
– No legal constraints may restrict the extent, objectives and methods of auditing, except for limitations related to public policy considerations (protection of privacy, public security, civil list, etc.). However, these limitations must be specifically defined by law. The SAI must make a report on the restrictions imposed on the
performance of its task. In all cases, alternative audit methods must be provided for by law,

- With regard to projects financed internationally, bilaterally or jointly, the institutions of the countries on whose territory the infrastructure projects are constructed must be associated with the auditing authorities of the international institutions or the SAIs of the donor countries.
- The SAIs must have sufficient resources available to carry out their tasks in complete independence.

The developing tasks of the SAIs

Remarks:

The Working Group notes the growing complexity of contracts (computerization, communications, new construction techniques, environmental concerns, etc.), new forms of financing (sale and lease back, alternative financing, etc.), or new forms of management of public services (concessions, privatization, association, partnership, etc.). The result is a change in conditions for auditing (objectives, extent, methods, restrictions, etc.).

Recommendations:

- The new techniques for the financing or management of public services must not detract from the auditing tasks of the SAIs and their responsibility to report to Parliament or the President of the Republic on the utilization of public funds and the management of public services,
- The SAIs must develop new auditing techniques suited to these new forms of financing and managing public services,
- Collaboration with other audit services or authorities (certified public accountants, auditors, etc.) must be envisaged and organized,
- The SAIs must organize training courses suited to these new forms of management of public services.

Auditing results

Remarks:

It is often difficult to evaluate the impact of the comments made by the SAIs.
**Recommendations:**

- The SAIs must be instructed to **report regularly** on the follow-up of comments made previously; such reports must be sent to Parliament at least once a year,
- Legislation must enable the SAI to **report to the judicial authorities** all facts that might constitute serious crimes or major offences. A previous hearing with the body audited or its supervisory authority is desirable in order to enable the administration to take the initiative in such reporting.

**Methodology**

**Remarks:**

The SAIs publish each year a catalogue of the irregularities noted on the occasion of audits (work not carried out but nevertheless paid for and documented, waste linked to delays in execution owing to inadequacies in planning or perfectly foreseeable circumstances, etc.).

The Seminar hardly at all elaborated on the methodologies adopted by the SAIs. Such elaboration would, however, have enabled all participants to increase the effectiveness of auditing work and thus improve control of auditing costs.

**Recommendations:**

- The SAIs must develop an **auditing manual** that reflects and sums up the experience accumulated during successive audits,
- The SAIs must develop an **appropriate methodology** for auditing public works contracts by dealing separately with 1) the planning of audits, 2) the execution of audits, and 3) the presentation of auditing reports,
- The SAIs must be capable of **identifying the full extent of their auditing activity**, 
- The SAIs must develop **evaluation criteria** and **analyse risks**,
- The SAIs must define **methods for the selection** of projects to be audited, on the basis of objective criteria (magnitude, rotation, statistical techniques, etc.),
- The SAIs must obtain the **assistance and cooperation of the departments** audited, must ensure that they obtain all the necessary documentation, carry out checks on the spot at the appropriate time, obtain from the experts the explanations that are indispensable for comprehension of the reports and ensure that contractors agree to comply with requests by the auditors,
- The SAIs must pay special attention to the **work of experts**, technicians and engineers and develop methods for evaluating their inputs and the relevance of their conclusions,
– The SAIs must develop scientific methods for improving questionnaire and interview techniques and publish for the use of auditors directives for improving the effectiveness and objectivity of such methods,

– The SAIs must focus on the existence, quality and reliability of internal auditing and the applicability of legislation and must critically examine the supporting documents produced, making sure that they do in fact correspond to reality, that their origin is beyond dispute and that they are sufficiently detailed and impartial (particularly in the case of the work of experts),

– The SAIs must ensure that they maintain documentation, to guarantee that operations are continuous (permanent files) and that the conclusions are indisputable (working papers).

Conclusions

1) Public works contracts absorb a major proportion of public resources,

2) The infrastructure projects financed by the public authorities are essential for the development of the nation (roads, irrigation, etc.),

3) Public works contracts and infrastructures entail major risks of waste and fraud,

4) Public works contracts at present involve more and more complex products, both at the technical level (even in the cases of classic products such as roads and buildings), and at the level of the modalities for financing and managing public services,

5) To perform their tasks and define their auditing methods, the SAIs must in future devote special attention to defining the needs of users, to safeguarding public resources and to ensuring their efficient and optimum utilization, in other words, verification of the utility of the public funds disbursed. They must therefore answer the question: Why?
3.  Report of Working Group 3  
(Report of the Working Group in German)

General principles governing the preparation and execution of public works  
and their audit by the SAI

Due to the complexity of public works and the short time available for study, the  
considerations developed by the German-speaking working group must limit themselves to  
the general principles governing the preparation and execution of public works as well as  
their audit by the SAI.

Public works are commonly executed by governments in the public interest and are funded  
either by the public or the private sector. They include works for the construction or  
improvement of infrastructure such as roads, bridges, hospitals, government buildings, or  
schools.

The preparation and implementation of public works is divided into the following phases:

1.  
   Needs assessment

   As a user government is responsible for identifying and assessing the needs. It should  
   assess its needs in a comprehensive manner, develop a sound statement of needs, study the  
   principal options to meet the needs including their funding (self-construction, leasing, rent,  
   purchase, accommodation in already existing buildings), and document the outcome in  
   writing. The government as a user should then take a decision giving due consideration to  
matters such as efficiency (investment and follow-up costs) as well as the intended use.

2.  
   Project organisation/funding

   Regardless of whether a central building administration handles the works, responsibilities  
   for an efficient project organisation should be clearly defined and allocated between the  
   users and the agencies charged with planning and executing the works.

   Prior to the realisation phase it is necessary to determine the overall project costs and to  
   ensure its funding.
3. **Planning**

Planning must be needs-oriented and should optimise functional and economic aspects. Significant changes requested by the user should be allowed only until the pre-planning stage has been completed.

At least preliminary planning should be completed before corresponding works contracts are awarded.

4. **Tendering and award**

The specifications must be comprehensive, correct, and precise enough to allow all bidders to obtain an identical understanding, to calculate the price for the performance to be rendered, and must provide a clear-cut definition of the contractor's duties. Contractors must not be subjected to uncommon risks arising from situations or events which they cannot influence and whose impact on prices and deadlines they cannot assess in advance.

The bidders shall be granted adequate time for preparing their bids. To maximise competition, preference should generally be given to open bidding. Equal conditions of competition should apply to all bidders. Nobody shall be given favourable treatment by receiving preliminary information, i.e. bidders must not have been involved in the planning stage.

The selection of the best bid must be verifiable on the basis of examination criteria (i.e. completeness of the bid, adequacy of the individual and aggregate prices, quality of secondary bids, and examination of speculative unit prices). The final selection must be substantiated. Factors such as performance capacity, reliability and professional competence will have to be considered.

That bid which appears to be the most acceptable in terms of technical, economic, and possibly also design and functional merits, should be selected. The lowest quote alone is not a decisive factor.

The client must be in a position to assess the adequacy of the bids and the suspend the bidding process if the general price level is excessive.

5. **Implementation and execution**

The sound implementation of works should be ensured by sufficiently competent and efficient project management. Emphasis should be placed on a comprehensive, unambiguous agreement and the early disclosure of responsibilities in order to avoid subsequent liability or warranty claims.
Contractual performance is to be ensured by the local building supervision and documented in logbooks, constant on-site measurements and a photo-documentation. The precise documentation of the construction works together with identified deficiencies is a key element for proper billing and settlement.

The sound execution of works, the handing over of plans and technical documentation (e.g. site plans, operating instructions), a sufficient test operation, as well as the instruction of future operating staff are prerequisites that must be met before the works can be handed over and accepted in due form.

During acceptance, all deficiencies are to be recorded. Their correction is to be enforced and monitored subsequently.

6. Use

Compliance with the budgeted operating costs should be monitored with a view to their optimisation.

7. Recommendations

Audits of public works should be conducted in a timely fashion to allow for the widest-possible implementation of the audit findings with a view to the economy, efficiency, effectiveness of the construction works ("the three E's").

In order to safeguard the division of executive and auditing activities, only such facts and measures which have already been decided upon should be subjected to audit, e.g. audit of authorized plans before construction works begin.

The external audit by the SAI should be carried out independently of the concomitant internal audit and cannot replace the latter.

The SAIs audit approaches should basically cover the full scope, from needs assessment to use. In order to achieve the above-mentioned audit objectives, the selection of audit priorities should be adjusted to the given works project and its progress.

Any comprehensive audit of public works should include the financial and economic dimension (capital and follow-up costs)\(^1\) as well as the technical side. For this, specially trained (in-house) staff should be available. External experts may be used in exceptional situations.

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\(^1\)As far as auditing of corruption in construction projects is concerned, reference is made to the results of the 12th UN/INTOSAI seminar held from 21 to 25 October 1996 in Vienna, Austria.
The audit should last long enough to ensure high-quality audit findings. Special emphasis in this context should be placed on on-site examinations to be able to compare actual and targeted results.

As far as the different organisational arrangements for public works are concerned (e.g. different level of involvement of the state), the audit competences of the SAIs should, if necessary, be settled by way of contract between the client and the contractor.

By providing relevant information to the ministries and the subordinate departments concerned, SAIs should ensure that audit results are regarded as being of general significance that extend beyond the individual case.
4. Report of Working Group 4  
(Report of the Working Group in Spanish)

This document reflects the opinion of the members of the Spanish Working Group on the results of the UN/INTOSAI Seminar on the Role of Supreme Audit Institutions (SAIs) in Auditing Public Works.

1) Evaluation of award, bidding and tendering procedures for the allocation of public funds to construction projects

Public works are investments intended to generate capital for the public sector and can be divided up into several types of projects.

Their value is generated by the capitalization of expenditure plus interest over very long periods of time.

The system of public investment in construction projects has two principal aspects:

- The return on public investments and the increase in the service capacity of the public sector, and
- financial aspects.

Since these investments are in general of a long-term nature, they demand financing over a number of years, covering several budget periods.

The justification for public investment in construction projects is derived from the purpose of the investment, its effects on expected productivity and from the compatibility of its ecological and social impact with the overall objectives of society.

Recent studies have shown that the return on and the productivity of capital invested is substantially lower in the public than in the private sector.

Decisions to invest in public works projects therefore have to be taken on the basis of optimization criteria, wherever possible assigning funds to be invested to sectors and projects with the maximum economic and social return.

In that context, cooperation with specialists from international or multilateral auditing agencies is an appropriate method for commencing the evaluation of the decisive processes in raising funds to finance investment projects.
2) **Examination of the pre-contractual phases**

Once it has been decided to audit a construction project, it is vitally important to consider certain points, in keeping with the SAI’s auditing programme, such as the composition of the auditing team and preparatory administrative work on the project.

With regard to the composition of the auditing team, in addition to working out the detailed planning of the various stages of auditing as well as the relevant technical directives, special care must be taken that the team includes persons whose qualifications cover the various subjects and techniques involved, so as to guarantee correct evaluation of the project. In carrying out auditing in this preparatory phase, it is necessary to examine all the basic documents concerning the project, such as: the administrative decision to implement the project in question, the relevant technical and administrative directives, the cost estimates, the availability of sufficient legally sound funding and the verification of ecological viability and other studies that are either required by law or follow from the inherent purpose of the project.

Subsequently, it is necessary to concentrate on the regularity of the action taken by the administration in selecting the contractor.

3) **Verifying the contract award procedure**

In this phase, the administration advertises its intention to carry out a construction project by means of a public invitation to tender. It requests the submission of bids in order to select the one that best meets its needs.

The procedures for selecting the contractor may be normal or exceptional. Under the normal procedures, the prevailing principles are publicity and free competition, which do not apply in exceptional procedures.

Among the exceptional selection procedures, we can mention the direct award of contracts, which is practised only in cases of absolute urgency or secrecy or if it is permitted by law when the services to be rendered are of the same nature as those under other contracts.

Normal procedures can be open, consisting of only one phase during which any contractor can present a bid. However, they may also be restricted, consisting of two phases. In the first phase, bidders must satisfy a number of conditions exactly defined in the invitation to tender; in the second phase, several possible bidders are selected and invited to submit concrete tenders.
There are two forms of ordinary procedures, the subasta (auction procedure) and the concurso (competitive procedure).

The subasta is the ordinary form of award in which the cheapest bid is automatically accepted.

In the concurso, the administration must consider not only the financial aspects of the bids but also the technical specifications and, if appropriate, the technical, commercial and financial capacity of the bidder, as defined in the invitation to tender.

The SAI must bear in mind that the application of one or other form of award does not depend on the wishes of the agency initiating the project but on the special conditions of the individual project. Thus, the subasta will be the suitable form of award when the work is clearly defined and delimited, so that bidders cannot introduce technical improvements in their tenders. This is normally the case in public construction contracts. The concurso procedure, on the other hand, should be used only in cases in which the administration considers that the project it has prepared can be improved through the presentation by the bidder of new technical variants or when the structure is of such technical difficulty that the contractor must meet special requirements.

The tasks of the SAI in this context consist in determining, first, whether the selection and award procedures have been followed appropriately and, secondly, whether the relevant operating guidelines have been correctly observed in implementing them.

Once the decision on the award has been made, the contract is drawn up and announced and the contract work to be carried out is published.

In this context, the SAI must verify that the legal requirements have been met and that the bonds and guarantees for performance of the work have been provided. This is immediately followed by monitoring of the final phase.

4) The contract performance phase

In this phase, the contractor has to perform the work according to the technical specifications and within the time limit established.

Auditing in this phrase is limited, among other things, to inspection of the work, which, however, has to be done very selectively.
The special objectives of a posteriori technical auditing are:

- To verify that the quantities certified and paid for are in fact logically consistent with the quantities actually incorporated in the structure.
- To verify and evaluate execution of the finished work in conformity with the technical specifications defined in the contract.
- To evaluate the progress of the work and compliance with time limits.
- To determine the effects and causes of any discrepancies and to recommend action to correct any deficiencies noted.

Finally, the acceptance certificate on the completed work should be examined in the light of legal requirements and the provisions of the contract.

5) The auditing report on public works contracts

This process culminates with drafting the report, which should cover each individual step of the process and all aspects to be observed in auditing public works projects.

The recommendations of the report should be formulated constructively; their purpose must be to improve the internal auditing system and to correct any errors and deficiencies noted in the operations audited, always taking cost-efficiency criteria into account. Care must always be taken that the benefits derived from applying recommendations are greater than the cost of their implementation.

Experience to date has shown the clear advantage of presenting the draft report in advance to the audited body for comments before its approval. That should be done at the time when each SAI considers it most appropriate, in conformity with its operating rules.

The purpose of this recommendation is to minimize the probability of errors of judgement by the public works auditor and thereafter to give the audited body the opportunity of pointing out all the circumstances that should be taken into account for the appropriate evaluation of the management and execution of the investment project.

The report must be presented in due form, within the time-limits established. If the importance of the facts noted in the audit should make it seem necessary, immediate action should be taken, that is to say, preliminary partial reports should be published.

Finally, it should be pointed out that it has been found most useful in auditing public construction projects to subject the auditing rules, procedures and working methods employed periodically to quality control by means of a self-evaluation procedure to be designed by the SAI itself.
I. United Nations:
The Role of Supreme Audit Institutions in Auditing Public Works

Introduction

Mr. chairman, distinguished speakers, participants, observers, ladies and gentlemen.

It is with great pleasure that I welcome all of you to this important UN/INTOSAI 13th interregional seminar on public works.

Before proceeding, may I first offer congratulations to our co-sponsors INTOSAI and, in particular to you, Dr. Fiedler, and your associates for the tremendous initiative and effort that you have put forth to make sure this seminar has become a reality. Many of you here may not fully realize the organizational and logistical work that must be carried out before such a seminar can take place. Again, thank you for your valuable assistance and cooperation.

As participants and observers, your presence here is an indication that you, also, view this joint seminar to be of importance to you in your respective audit offices. Thank you for taking the time from your busy schedules to be with us here in beautiful Vienna to share ideas and experiences regarding various aspects of managing and auditing public work. I know that, with your active participation, we will have another successful seminar.

Relationship between the United Nations and INTOSAI

As many of you may know, this is the 13th of a series of interregional seminars that the United Nations and INTOSAI have been partners in conceiving and delivering. It is my sincere wish that we remain good partners for many years to come.

So far, twelve previous interregional seminars have been organized and have covered a broad range of topics, including "The role of SAIs in fighting corruption and mismanagement", the subject of the October 1996, 12th UN/INTOSAI Seminar. Other topics have included: Auditing of public sector undertakings, audit methodology, internal management control systems, and computer-assisted auditing. I know that this seminar will be as interesting and beneficial as earlier ones.
As you may be aware, upon request of governments, the department of economic and social affairs provides policy advice, and technical support and assistance in a wide range of subject areas all of which is designed to "promote social progress and better standards of life" as called for in the UN charter.

We provide advice and support to governments in the fields of public sector management and capacity building, economic policy and management, social development, and planning and management in natural resources, environment and energy.

Emphasis is placed on assistance in designing, implementing and evaluating development efforts that are economically efficient, socially appropriate, sustainable and environmentally sound.

The range of specific subjects that we provide assistance with include:

- national elections;
- computerization and informatics;
- entrepreneurship and small business development;
- energy management;
- environmental management;
- governance;
- macro- and micro-economic restructuring and reform;
- military conversion;
- public sector accounting and reporting;
- public sector audit and transparency;
- public sector financial reform;
- privatization;
- social development;
- tax administration; and so on.

Ladies and gentlemen, please permit me a brief commercial message. If any of your audit organizations, or your governments, should need assistance in any of these areas, please keep our department in mind. Thank you!

My point, then, is that, in many ways, our policy advice and technical assistance work as it relates to auditing is entirely complementary and consistent with the good work of INTOSAI.

We both strongly believe that a strengthened independent audit office is essential to achieving improved accountability and transparency. Fortunately, a number of governments and other funding agencies are also coming to this same realization.
The seminar

A. Why was the topic of public works selected for this seminar?

First of all, the subject is one that is common to all of your jurisdictions.

Second, elements of public works are undertaken at virtually all levels of governments. At the national level, concerns may be focussed at construction and maintenance of buildings to house government offices and workers, or projects of national importance, such as museums. Intermediate levels of government may be dealing with infrastructure issues such as roads and bridges. At local levels, the interest may be more on direct public services such as fire and police protection.

Thirdly, particularly in developing countries and those in transition, there is a backlog of public works projects. So the need tends to be greater than for developed countries, and large sums of money are being devoted to meeting these public works needs.

Fourthly, many of these public works projects are quite large, complex, and take place over several years. They are difficult to manage, often requiring specialized knowledge and skills.

Frequently, inadequate accountability provisions are established beforehand. As auditors, you know that it is more difficult to fix something after it is broken. But often it is not easy to establish and put in place proper mechanisms in advance that would prevent, or at least reduce the impact of, negative consequences.

The natural tendency is for everyone to be in a rush to announce and initiate such projects. Such announcements are often accompanied by a lot of public and press attention devoted to them. Also, when complete, the opening of a new museum or a new stretch of highway, for example, is a perfect occasion for a "Kodak Moment" for politicians and others involved.

Ladies and gentlemen, let me be clear. There is nothing wrong with such attention. It is just regrettable that an equivalent amount of attention is not usually given to proper financial management practices before or during the course of such projects.

The above reasons are some of the ones why public works is a subject that merits our attention over the next few days. I am sure that you could add to these reasons with thoughts and examples of your own.
B. The subjects we are going to cover in this seminar

You all have your seminar outlines in front of you, so I will not devote a lot of attention to this area. The areas include:

— initiation aspects, such as: real estate acquisitions and project planning; and

— execution aspects, such as: acquisition, including tendering and awarding contracts, and delivery and acceptance of commissioned works, and billing.

The listing of subjects, as well as the expert presenters, is quite impressive. The work you will be doing on cases will add to the practical application of the conceptual ideas raised.

Although not listed as one of the subjects, perhaps the speakers may wish to comment on what I see as an emerging issue warranting audit attention. That is, the audit of large computer systems being undertaken by governments (sometimes referred to as "systems under development"). In this era of rapidly advancing technology and public sector downsizing, it is very tempting for governments to introduce massive computer systems to assist in the delivery of government programmes.

That is natural. However, in some jurisdictions, and maybe in yours as well, the introduction of large computer systems usually is very costly and is fraught with long delays, many changes, and huge cost overruns.

I will not say more, other than to suggest that it is an important area, like public works, and one that your audit offices should keep in mind.

C. A proposal!

Over the next week you will have presentations and exchange ideas on the subject of auditing public works. In my comments, I don't wish to discuss matters which will be covered later on.

Instead, I would like to use this opportunity to set out some points which I believe are very important for you to keep in mind when you are carrying out audits of public works, and other subjects for that matter.

Audit is a process. A process designed to provide independent and relevant information to those to whom you report. This is done to assist them to hold the government to account for the management of public assets and public revenues and expenditures. It is a
professional and important activity that should be guided by professional standards, such as those prepared by INTOSAI, and conducted by qualified audit staff.

I recommend that you follow the following seven steps of my proposal:

1. Develop clear audit objectives.

   It is important for staff working on the audit, and others, to be very clear on what the audit objectives are. At the general level, is it a financial audit, a compliance audit, or a form of performance, or value-for-money audit?

   Not only should the focus of the audit be clear (what you are auditing) but, also, the purpose of the audit (why you are auditing that subject). For example, (the payroll of the social assistance programme is being audited for the purpose of determining whether all payments have been in accordance with programme regulations - a compliance audit example). The point is that the word "for the purpose of" should be included explicitly.

2. Establish reasonable audit criteria.

   For financial statement audits, these would be "generally accepted accounting principles" or GAAP. For performance audits, such criteria may have to be developed for the specific audit. They should be set at a reasonable level of expectations ... that is, what a reasonable person would expect to be in place.

   You may ask: How many criteria should there be? Enough to cover the subject being audited, and usually five or six general criteria. Let me explain, often criteria are categorized into a few high level general criteria, then, each general criterion may be subdivided into a few subcriteria.

   It is usually advisable to review at least the draft general criteria with the management of the entity being audited. Management, after all, usually knows the operations better than the auditors. It is prudent to have their input and concurrence before starting the audit examination. It is advisable to have mutually-agreed upon criteria to avoid after-the-fact criticism. And no, I do not think that this step compromises the independence of the auditor. It is just good practice to maintain positive communications and relationships. Should management not agree with the draft criteria, they should then suggest ones that they believe would be more appropriate.
3. Assess audit risks.

Before developing detailed audit procedures some consideration should be given to assessing audit risks. That is, identifying those inherent factors that may impact on the nature and success of the audit. For example, the integrity of management, the soundness of management systems, the ready access by auditors to all relevant information, previous audit results, and so on.

4. Prepare and document detailed audit programmes and procedures.

This step is important, for it determines the nature, extent and source of evidence needed to judge whether or not the criteria have been met and, in turn, whether the audit objectives have been met.

5. Assess evidence in relation to audit criteria.

Auditors and their supervisors will have to exercise considerable judgement as to whether the evidence obtained is persuasive and sufficient.

Generally, personal opinions of those interviewed tends to be a weaker form of evidence than documentary evidence. At this stage, the evidence should be compared against the criteria and findings should be identified.

6. Prepare draft report.

These "findings" should be reviewed with senior management of the audited entity to help ensure that all pertinent facts are known and correct. You want to avoid criticism that your facts are incorrect or incomplete.

... Very little hurts the credibility of an audit office more that to have its work criticized publicly. Credibility, once called into question or lost, is very difficult to restore.

Then, the auditors should start to formulate conclusions and, where serious problems exist, consider preparing recommendations to address the main problems identified.

It is important that there be a linkage, or "cause and effect" relationship, between what is being recommended and the nature of the problem identified.

Also, consider the cost of implementing the recommendation ... it must be less costly to implement that the cost of the problem it is trying to overcome.
Ladies and gentlemen, if I may be permitted a personal observation. In my view, audit reports often do not adequately prioritize issues and often have too many recommendations. It may be better to address mainly the top three or four problems, rather than identifying all of them in an audit report that is to become public.

Do not misunderstand me. All audit concerns found should be reported. The question is "how" and "where". The less important matters can be communicated through "management letters" to the appropriate officials.

7. Finalize and issue the audit report

After considering: (1) The degree to which the criteria and audit objectives have been met, (2) the feedback from management of the audited entity, (3) the priority issues to be reported, and (4) the practicality of any recommendations that have been made, the report should be finalized and issued.

Care should be taken with the content and with the format. It should be concise and to the point, and be easily readable using non-technical language. After all, the press and the public (where audit reports are made public) have to understand the issues.

That brings my seven proposals to an end. I hope these thoughts may be of assistance to you as you reflect over the next week on auditing public works.

**Conclusion**

I see a very bright future for continued cooperation between our two organizations, DESA and INTOSAI. Some subjects that might be considered for future seminars may include:

— further developing value-for-money auditing (or management or performance auditing as it is called in some jurisdictions);

— assisting in placing more audit focus on "accountability and auditing for results";

— assisting in developing audit methodology to support improved accountability and transparency;

and, as technology continues to advance,

— assisting in the development and implementation of computerized audit tools and record-keeping.
Participants and observers, I am confident that your deliberations at this seminar will contribute to improved institutional measures that will enhance accountability of governments to their legislative bodies and, ultimately, to the general public in your respective jurisdictions. Please carry back to others in your audit offices the audit knowledge you will have gained here.

INTOSAI, it is my sincere wish that we remain good partners over many years to come.

Thank you, Mr. Chairman, for allowing me this opportunity to say a few words to our participants.
II. World Bank:
The Role of Supreme Audit Institutions in Auditing Public Works from a Donor's point of view

SAI

- Independence
- Professionalism
- Capacity
- Evidence of helping yourself
- Vivid examples
- Credibility

Donor

- Are they professional?
- Are they independent?
- Are they doing good work?
- Are they improving?
- Are they building capacity
- Are they credible?

Why should a Donor/Lender be interested in SAI?

- Money is taken from Donor taxpayer
- Loan imposes obligations on recipient taxpayers
- Terms are favorable to recipient
- Money is given for specific purposes
- Assurance is provided by SAI to Donor/Lender

Who does what?

- **Donor/Lender**
  - Awards contract
  - Looks at Legal requirements
  - What Accounting & Auditing standards are applied?
  - Follows up on recipient
- **Recipient**
  - Prepares and requests
  - Executes
  - Accounts and controls
  - Completes
  - Reports
Public Works - Hard Works

- Roads
- Dams
- Schools
- Hospitals
- Computers

Public Works - Soft Works

- Computer software
- Training
- Communications
- Financial management systems
- Environmental considerations
- Legal aspects
- Social and cultural issues

Hard Auditing

- Check what was financed was purchased
- Check what was certified was provided
- Check integrity of procurement process
- Check authorizing agent is in no way connected to the contractor
- Check that assets exist and are adequately controlled
- Check that loan is not "parked"
- Check for evidence of kick-backs/side deals
- Check that records are accurate
- Report within the deadlines

Soft Auditing

- Judgment is necessary at all times
- Does the project make sense?
- Is the money being used as intended?
- Is the project sustainable?
- Is the Donor being informed appropriately and in time
Audited Financial Statements

- Purpose is to assure that money spent reflects actual expenditure
- Purpose is to record financial position of project, but must serve management so that they improve themselves
- Purpose is to demonstrate that budget/monitoring/reporting on projects is aligned and there is progress

Conclusions

- If you help yourself, you will help the Donor/Lender
- If you help yourself, you will increase your capacity and your credibility
- If you help yourself, Donors/Lenders become comfortable working with you
### III. List of papers

1. *Country papers by SAIs*

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2. **Presentations by SAIs**

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3. **Papers by other organizations**

<table>
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<td>World Bank</td>
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