

Challenges and Prospects for the Japanese PFI

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The use of a private finance initiative (or “PFI”) as a new vehicle for building infrastructure has recently become a focus of attention. In May 1998 the Liberal Democratic Party submitted a “Bill to Enact the PFI Promotion Act” to the Diet in the form of a legislator’s bill. Whereupon the Ministry of Construction published its Guidelines for the Japanese PFI (MOC Guidelines), which was followed by a similar promotional proposal by the Ministry of International Trade and Industry, thereby bringing Japan’s PFI into its first stage in

progress towards implementation.

The increase in public works projects in general under the comprehensive economic policy, as well as the promotion of a private sector lead PFI vehicle, have the potential to forge major changes in Japan’s approach to improving its infrastructure. The present paper therefore discusses the challenges and prospects for the Japanese PFI.

SUMMARY OF PFI BILL

Core Concept:

The private sector should be relied upon as much as possible in

all appropriate areas.

A clear delineation should be made of roles to be filled by the national government, by local governments and by the private sector, and the public sector’s involvement in the private sector should be kept to a minimum.

Project Selection:

The selection process is to be made transparent through means such as open competition.

Objective evaluations will be made and published of particulars such as the benefits and efficiency of the projects.

Assistance by Government:

The national government and local governments may allow public property to be used free of charge or for a consideration that is lower than the market rate.

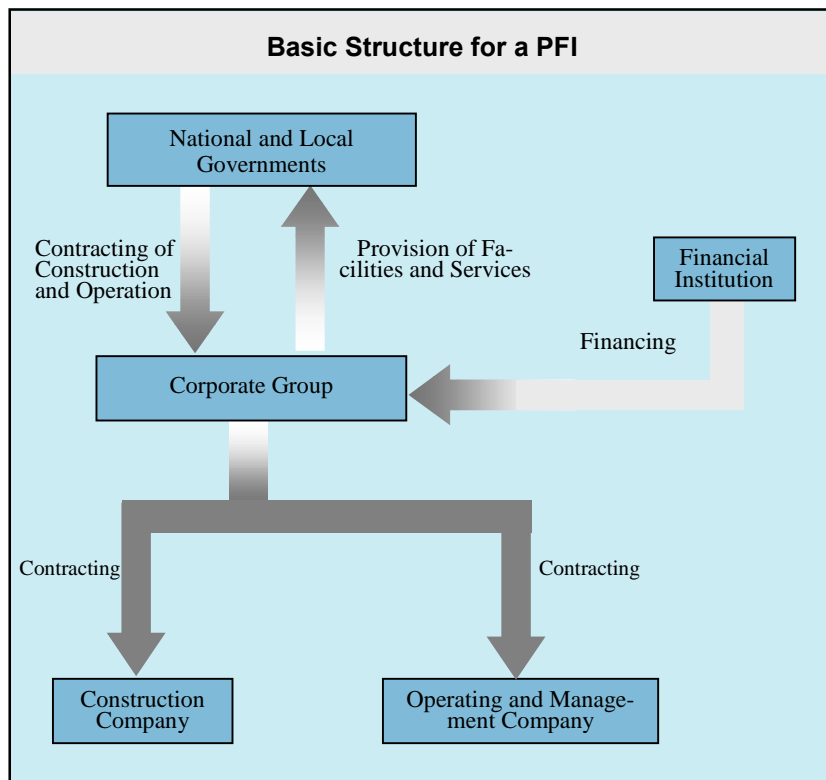
The national government and local governments may make equity investments or guarantee the obligations of the project entity.

Government affiliated financial institutions may make no interest loans.

1. What is the Japanese PFI

The PFI concept was introduced in the United Kingdom in 1992, and has been used as a mechanism to procure public services from administrative entities, and to exploit the expertise of the private sector in areas of financing, design, construction and operation in the course of providing public services. The PFI vehicle differs from privatization, in which the private sector is liable for providing services. Instead this vehicle mainly involves a structure in which the government purchases services such as the construction and operation of public facilities from the private sector, and provides administrative services for general public use.

The Japanese PFI utilizes the concept of the British PFI, and enhances it with mechanisms such as Japanese style subsidies. The legislative bill is currently under deliberation in the Diet, and will likely be put into force in the Spring of 1999. This comes six years after the British version was put into effect, and the impact of this vehicle in the UK is beginning to become apparent, with approved projects substantially exceeding 10% of total expenditures for public works.



By introducing the PFI concept, Japan will be able to reduce the financial burden of the national and local governments, while at the same time improving the country's infrastructure. The Japanese PFI will also offer the possibility for increased business possibilities for the private sector. The government is also placing emphasis on putting this vehicle into practice, as it will also help stimulate the country's economy.

Several issues are presented by a comparison between the Japanese PFI and the PFI in the United Kingdom, the country of origin. These have been organized into three categories, i.e., the scope of eligibility, standards for approval and auditing mechanism, and have been summarized in Table 1.

2. Why Does Japan Need the PFI

PFI can be seen as an extension of Japan's administrative and fiscal reform. The administrative and fiscal reform consists of two elements, both fiscal and

administrative, as set forth in the diagram on page 6.

As a result of (i) and (ii) shown in the diagram, public investment must be cut.

Current Level of Public Investment
¥44 trillion (8.5% of GDP)

to ¥30-¥35 trillion
4% of GDP at year 2010

Japan, however, will have a substantial need for infrastructure in the future, and the country's existing infrastructure needs to be improved. This means that investment from the private sector must be introduced into infrastructure projects, in order to cover the resulting funding gap (which is projected to be from ¥9 to ¥14 trillion). It is also true, however, that simply using private sector financing for the public sector will not allow the market mechanism to work and will be inefficient, which would contradict the purpose of

Table 1. Comparison of PFI in Japan and the United Kingdom

Japanese PFI (PFI Promotion Bill)	British PFI
<p>Limited Application</p> <p>Construction, Management, Maintenance and Construction of Public and Similar Facilities</p> <p>Public and Similar Facilities Covered</p> <p>Public Facilities Facilities such as roads, railroads, airports, rivers and streams, parks, and water and sewer lines</p> <p>Facilities Provided for Public Use Government offices and lodging facilities, etc.</p> <p>Facilities Offering a Public Benefit Public housing, educational and cultural facilities, waste disposal facilities, medical facilities, social welfare facilities, correction and custody facilities, parking lots and underground arcades.</p> <p>Information and Telecommunications Facilities New energy, recycling, tourism and research facilities</p> <p>Other Such other facilities as are designated by Cabinet Order as being equivalent to the above</p>	<p>Scope of Application</p> <p>Application Public service projects requiring the formation of public assets which would be difficult to privatize or outsource.</p> <p>Definition of Capital Assets Capital assets are long term assets. In addition to tangible fixed assets, capital assets also include intangible assets such as computer software and patents.</p>
<p>Lack of Clarity in Project Approval Standards, and Incompleteness of Rules for Fiscal and Financial Efficiency</p> <p>Projects that are appropriate for implementation by the private sector should be contracted to the private sector to the extent possible.</p> <p>Standards for Determining Whether a Project is Appropriate Standards included the following: Consideration is to be given to the proper allocation of roles between the national and local governments, and the private sector, as well as efficient use of fiscal funds; while at the same time, Support for expenses will be possible from sources such as revenues to be earned from the project.</p> <p>Main Incentives</p> <p>No Interest Loans Loans at no interest shall be permitted within budgetary constraints for funding of those selected projects that can be recognized to be particularly in the public interest.</p> <p>Fiscal and Financial Support In order to promote implementation of identified projects, national and local governments will implement the necessary legal regulations and tax incentives and provide support in the form of fiscal policy and financing in accordance with the basic policy and policy of implementation.</p>	<p>Standards for Project Approval, Etc.</p> <p>Standards for Eligibility All projects for which greater VFM can be expected than would be the case if the project were to be implemented using a traditional structure are to be carried out through a PFI. Standards Set Forth by the Ministry of the Treasury The services must be needed, and there must be a need for these services to be provided by the public sector. The possibility of a PFI is to be considered without exception when providing public services requires the need to create capital assets. Reasons must be stated if a study determines that pursuit of a PFI is difficult.</p>
<p>Incompleteness of Auditing Mechanisms</p> <p>The Commission to Promote Private Sector Funded Projects Etc., Is to Be Created Under the Prime Minister's Office</p> <p>Particulars to Be Deliberated by the Commission</p> <p>Particulars for which authority is to be delegated to the Commission under the PFI Promotion Law</p> <p>Status for determining implementation guidelines to be put in place in accordance with the Basic Guidelines</p> <p>Status for selection of specified projects as well as the use of vehicles such as private sector financing to improve public facilities, etc., in Japan.</p>	<p>Auditing</p> <p>The National Audit Office (NATO, the equivalent of Japan's Board of Audit)</p>

Source Documents Presented at a Symposium of the PFI Symposium Committee on New Energy and Recycling (June 15, 1998)

administrative reform. The private sector must participate not only in financing, but also in all areas of design, construction, operation and management. Thus in the future the private sector is to be relied upon to implement those areas of infrastructure of which it is capable, and the public sector will meticulously carry out its role as a purchaser of services. Moreover, existing administrative services must be streamlined through contracting to the private sector and through privatization, thereby stimulating the private sector economy. Consequently the PFI structure constitutes a policy vehicle for administrative and fiscal reform, as well as a means for outsourcing to the private sector and privatizing entities such as special corporations.

3. Sectors Suited to the PFI Vehicle

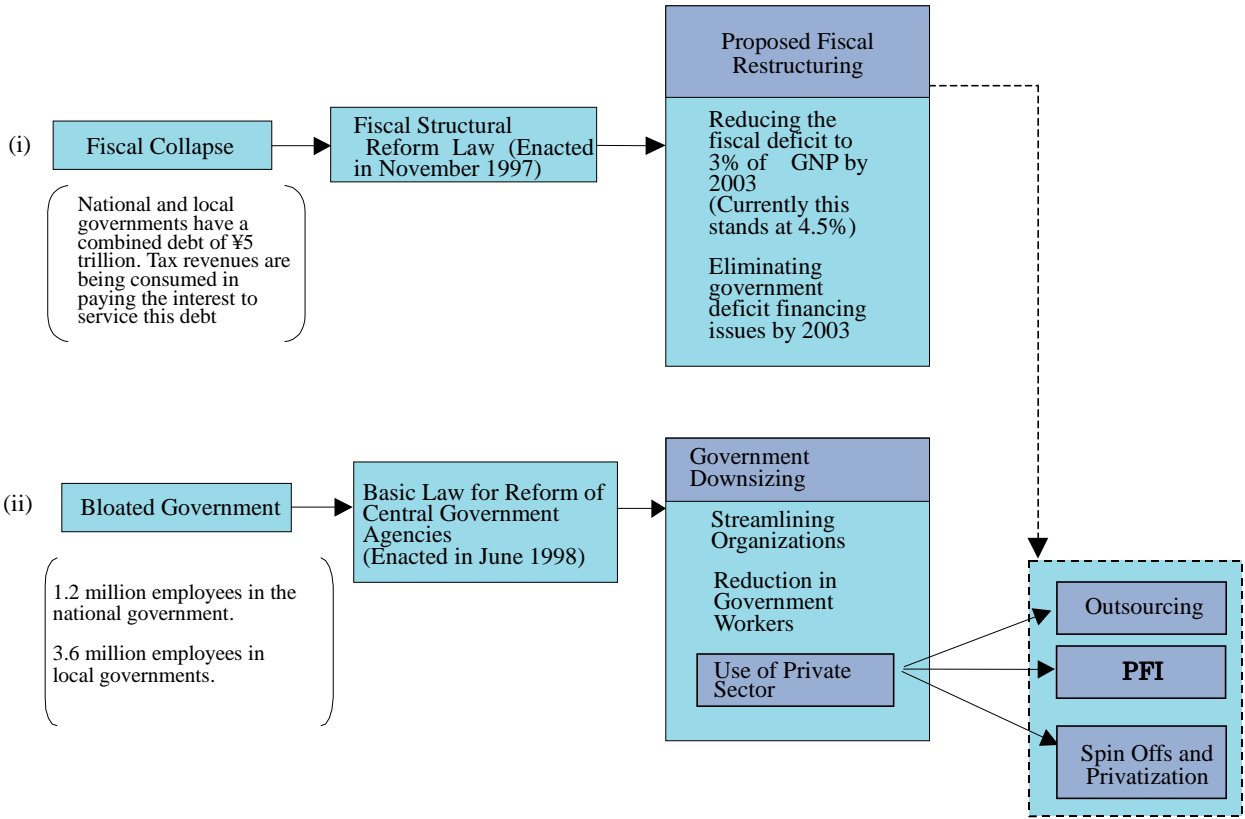
For the public sector, a PFI project would be any project through which it can enter into a partnership with the private sector and thereby achieve a means for providing public services of the nature described above at a lower cost than has previously been the case. Theoretically therefore, the PFI vehicle could apply to any type of public service that the government provides.

In the United Kingdom PFI has been adopted by all sectors of government and has spread to each agency and local government. A PFI may be used for any public service involving the provision of buildings, facilities or services. Actual projects extend across many sectors and include roads, bridges, prisons,

computer systems, government buildings, office facilities, urban transit, subways, hospitals, schools and social insurance services.

In Japan, many local governments are beginning to consider the PFI vehicle as they face an increase in obligations for prefectural bonds issued during the country's bubble economy, and are in a period of fiscal restructuring.

- The Osaka Municipal Government has decided to introduce PFI in their civil engineering division on a test basis. The government has identified pay parks (renovating pools in municipal parks), parking lots (replacing municipal parking lots), and toll roads, and is considering the possibility of employing PFI as well as reviewing case studies to extract issues.



- Saitama Prefecture has decided to make a public offering using a PFI, in addition to the former land readjustment project vehicle, as a means for exploiting the vacant site of the former Musashino Line train depot (83.8 ha).

- The Tokyo Metropolitan Government has decided to use a PFI for a 12 MW generator at its Kanamachi water treatment plant. The government also plans to use the same vehicle at its water treatment plants in Asaka, Misato, and Misono.

- Mie Prefecture has started a public offering for companies to participate in a study of the possibility of utilizing a PFI in tourism and leisure facilities (including sanitary facilities using seawater, golf courses, and a business incubation center in the Eastern Kishu region) for the purpose of revitalizing areas that are losing their populations.

As discussed below, PFI projects for local governments offer a substantial market potential, depending on the results of the various questionnaire surveys.

4. Requirements for Achieving a PIF

The following lessons can be learned from Britain's experiences with its PFI.

Achieving solutions with a PFI should be sought where there is a high possibility of achieving value for money (VFM). It is important to clearly assess the possibility of obtaining VFM in a visible sense within the early stages of the PFI procurement process. This will enable some evaluation of the possibility of reducing costs with a PFI. The final assessment of whether a PFI will generate VFM, however,

can only be made at a later date, once the details of the project have been clarified, market tests have been completed, the project has been placed up for bidding and contract negotiations are close to completion.

VFM will need to be demonstrated by comparison of private sector PFI bids with a detailed public sector comparator (PSC). The PSC describes the option of what it would cost the public sector to provide the needed services using a traditional vehicle. The following conditions must be satisfied in order for VFM to be demonstrated and for a PFI to exist as a practical option:

the government must have a need for the relevant services (need on the part of the government for a PFI);

the private sector must be able to operate the project both under law and regulation (deregulation and opening of markets to the private sector);

the private sector must possess the necessary management capability and expertise (private sector capability and expertise);

the contract conditions must properly allocate to the private sector those risks that the private sector can control in order to exploit the private sector's technical innovation, management capacity, and creativity (existence of conditions for cost reduction and improved efficiency through utilizing the dynamism of the private sector);

private sector operatives must exist that are capable of providing the services of the project in question, and are fully willing to accept the risks involved (desire to participate on the part of private

businesses); and

financiers must exist in financial markets who are willing to finance the project in question (capacity of financial markets).

5. Project Types and Implementing Procedures for the Japanese PFI

The Guidelines issued by the Ministry of Construction classify PFIs into three types depending on the roles fulfilled by government and the private sector.

Type 1: Fee Payable Type

This is a vehicle in which the private sector can earn profits. The private sector builds the facilities, and operates the enterprise. The project achieves profitability independently, as tariffs are collected from customers for their use of the facilities. The role of government would be limited to initial plan design, approval of the project (which in some cases would also involve procuring the necessary land), and acquiring the facilities after a certain time has elapsed. The private sector will bear almost all of the project risk:

Current Projects:

Trans-Tokyo Bay Highway
Multipurpose sports stadium, museum, amusement facilities and park facilities.

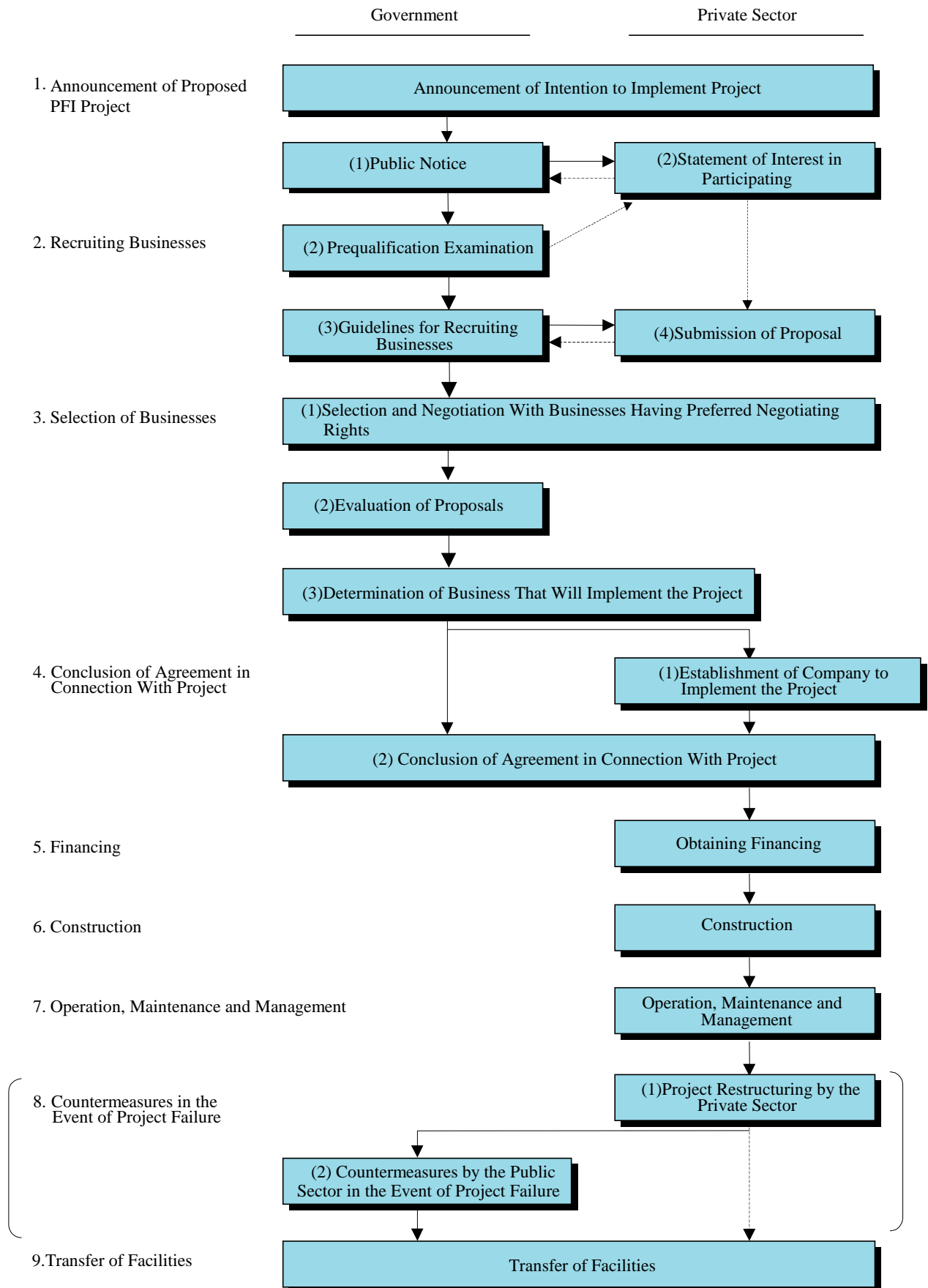
Projects Under Consideration:

Toll roads
Projects to convert sewage to resources (recycling project)

Type 2: Combined Public and Private Project

This is a vehicle in which public facilities and private facilities are combined into one unit, where the project needs of the public sector

Table 2. Project Flow for a Japanese PFI



and the private sector are in concord, and the public sector can reduce its costs for the project below what would be the case if it pursued the public sector component on its own. An agreement is concluded which clearly classifies the project into its public and private divisions, and also sets forth the allocation of risk between the public and private sectors.

Current Projects:

Land readjustment projects, urban redevelopment projects, comprehensive housing and urban development projects, projects to use free space over sewage treatment plants, and rebuilding of public housing projects to include private sector facilities, as well as projects to use available land around large levies and expressways.

Project Under Consideration:

Public park over recycling facilities, combined public park and cemetery, public parking lot combined with privately operated facilities in central urban areas, improving public walking areas through rehabilitating buildings, building optical fiber networks using the space around rivers and streams, and using the area over flood retention ponds associated with housing developments.

Type 3: Purchasing of Public Services

This is a vehicle in which the private sector builds a facility and recovers its investment cost by receiving payments from the public sector (generally in the form of lease payments). Since the private sector has expertise in management and operations, this is an area in which relying on the private sector can be projected to enable infra-

structure to be designed, built and operated efficiently and effectively.

Current Projects:

None.

Projects Under Consideration:

Housing welfare services, waste disposal and recycling projects, water treatment plants, sewage treatment plants, government offices, art museums and sports facilities.

Under the Guidelines from the Ministry of Construction, PFI projects are to be implemented according to the project flow set forth in Table 2.

6. Issues at Present

Japan faces many challenges in promoting the PFI and enabling it to be accepted to the extent that has been the case in the United Kingdom.

(1) Steady Implementation of the Comprehensive Economic Policy

Japan's recent "Comprehensive Economic Policy" has included the following provisions in connection with the Japanese PFI (see Table 3), and the content of this policy should be persistently put into effect.

- Prompt enactment of the "PFI Promotion Act."

- Building an organizational structure within the government to promote the PFI (PFI Promotion Committee).

- Support measures (study coordination expenses and creating a facility to extend financing to PFIs).

(2) Liberalization of Legal Regulations in Order to Encourage Participation by the Public Sector on a Broad Scale

In many cases under present law only the public sector can function as the core entity implementing

projects involving the improvement and operation of infrastructure, in its position as the manager of these projects, with the public sector here including the national government, local governments, as well as government corporations and associations. Deregulation and liberalization of current legal regulations is urgently needed in order to encourage broad based participation in PFI projects by businesses that are infused with the entrepreneurial spirit. Specific changes required involve amendment to the Highways Act, the Harbor Act, the Airport Improvement Act, the Rivers and Streams Act, the Metropolitan Parks Act, the Water Supply Act and the Sewage Act, to include the PFI business entity within the definition of "manager."

(3) Creating an Organization to Promote PFIs from the Perspective of the Private Sector

- In order to promote the PFI concept in Japan, the country must deal with the complexity of its procedures resulting from the large quantity of permits required, the extent of discretion available to bureaucrats, and the bifurcation of the country's bureaucracy into vertical units that lack coordination. At the present time a private company must compile a veritable mountain of documents if it wishes to begin a PFI, and must make repeated visits to government offices in Kasumigaseki, the relevant prefecture, as well as the local municipality. This places a substantial burden on the companies concerned. It is also true, however that PFIs do involve public services even if they are led by the private sector and in many cases require public assistance in order to assure project viability. These ele-

ments require some type of approval mechanism for the private businesses that will implement the PFI project.

To that end a PFI Promotion Organization (“PPO”) is required in order to provide qualification for projects and to facilitate permits, in view of the business environment in

which Japan operates. Two perspectives are essential for the establishment of this organization: first the PPO must be given a high status that is not limited by the discretion or territory of a particular agency or local government, and the second is that the PPO must have objective standards for evaluation,

and a market orientation. Thus the PPO must in all senses serve to clarify the position of the private sector of promoting participation by private businesses into PFI projects.

Approval of private sector projects requires the full integration of a bidding system that accommodates this shift from the public

Table 3. Summary of the Comprehensive Economic Policy Relevant to PFI’s

<p><u>1. Enactment of the Draft Law in Connection With Promoting the Improvement, Etc., of Public Facilities, Etc. Through the Use of Private Finance, Etc. (PFI Promotion Bill) at This Ordinary Session of the Diet</u></p> <p>Summary of Bill</p> <ul style="list-style-type: none"> - A broad category of public facilities, etc., are eligible (including roads, harbors, airports, water and sewage lines, industrial water, waste treatment plants, new energy resources, recycling facilities, heat supply facilities, and information processing facilities) - Compiling of Basic Guidelines for the Entire Government - Compiling of Guidelines for Implementation (in the form of requirements for seeking offers) on the part of each agency in the central government and by local governments - Legal measures (including deregulation), assistance packages (fiscal, financial and tax incentives), allowing government investment, credit guarantees, no interest loans, use of government property for no consideration or at reduced cost, and acceptance of long term government obligations - Establishment of the Commission to Promote Private Sector Funded Projects Etc., as the promotion organ within the national government <p><u>2. Fiscal Measures</u></p> <p>Establishment of a PFI Financing Vehicle Based on the Concept of Project Finance, Within Government Affiliated Organizations Such as the Japan Development Bank</p> <p>Summary of System</p> <ul style="list-style-type: none"> - Facilities to Be Covered: Facilities such as Refuse Derived Fuel Powered Generators, recycling facilities, heating facilities, general waste treatment facilities, and circuit facilities to test mobile communications - Interest: To Be Determined - Ratio Eligible for Financing Through Debt: 50% Projected Provided that this is to be applied flexibly within 1998 <p><u>3. Budget</u></p> <p>The cost of studies and coordination in connection with PFIs is to be placed in the account of the government as a whole.</p>

sector to the private sector.

- Moreover, a suitable organization to promote PFIs is also needed at the local government level, since a considerable number of PFI projects are likely to be pursued at the local level. This specifically involves:

Disclosure of information that publishes an evaluation of the cost and performance of each project;

Using structures such as the PFI Creation Fund, to seek out local PFI projects;

Establishing a local PFI task force; and

Execution of responsibility to provide explanations to the taxpayer, and ensure transparency (to that end it is essential that thorough project management be implemented over PFI projects).

(4) Putting a System Into Place to Reduce Risk and Improve Profitability in Connection With Projects

Some policy measures are required to reduce the risk and improve profitability for private businesses, in order to promote PFI projects.

- Simplification of Contracting

This involves revising Japan's traditionally rigid contracting system and introducing a bidding system based on output specifications in order to encourage cost reductions by exploiting the creativity and inventiveness of the private sector. One example would be to take bidding for a bridge solely on the basis of essential conditions such as the number of lanes and loading conditions, leaving the type of the bridge, its structure, materials and method of construction to the discretion of the private sector. This will allow the principle of competition to work, thereby

bringing down construction costs.

Use of this type of *performance contracting* will also contribute to prompt revision of technical standards determined by the purchasing agency, to prevent designs by the contractor that contain specifications in excess of what is truly needed. Work quality, safety and performance on the contract after the bid is awarded will be secured by thorough project management (PM) in cooperation with consultants.

- Public Financial Assistance

The services that are likely to be covered under the PFI have heretofore been provided by the public sector and in many cases have a lower profitability than products and services offered by the private sector. Consequently some public assistance will be required in many cases, even though the project is being shifted to the private sector. In this case it is essential to consider assistance policies with a goal of creating sound and healthy private sector operatives.

In the UK public assistance has been approved in the form of issuing government guaranteed bonds, in France this takes the form of subsidies, while in the US this is provided through tax exempt municipal bonds.

A similar financial assistance is needed in Japan, as it will be difficult for the private sector to commit itself to the PFI vehicle unless the possibility of funding is introduced through *unsecured loans* or *credit guarantees* using the fiscal investment and loan program, or through *local government bonds*, including community bonds (bonds that are mainly subscribed by local residents or companies).

- Public Assistance Involving Project Coordination, Acquiring Land, and Improvement of Public Infrastructure

As stated in the MOC Guidelines, the following support policies are needed in addition to public financial assistance, to achieve profitability for private sector projects:

(a) Project Coordination

PFI projects are for the purpose of improving public facilities, and thus must be coordinated with infrastructure development plans on the part of the public sector. It would be desirable for the public sector to handle tasks such as determining the position of the PFI project within public development plans as well as handling studies and environmental assessments at the time this takes place.

(b) Acquiring Land

Although PFI projects may involve instances in which the private sector acquires land for a project, and instances in which the public sector provides the land either on a fee payable basis or for free, in many cases the proper course will be for the public sector to handle the actual work involved in acquiring the land, given factors that include the accumulated expertise that the public sector has at its disposal.

(c) Improvement of Public Infrastructure

In many instances it would be desirable that the building of access roads and other relevant infrastructure to support a project is performed at the public expense.

- Public Assistance if a Project Fails

Whilst the MOC Guidelines set forth rules for allocation of liability between the public and private sector in the event of project failure,

contracts must be permitted that allow for the national government or a local government to take over a project, or to provide temporary funding, provided that the project has a high public interest component. Required assistance would involve permitting the national or local government to buy out a project in which the public has a strong interest, and which would have a major impact on users if there is no means for payment in substitution or if services are interrupted. It would probably also be necessary for local governments to continue projects in the event of failures caused by natural disasters or other acts of God.

- Putting a Comprehensive Insurance Bonding System for PFIs into Place

Under the PFI structure the private sector will take on a considerable amount of project risk, which normally will be covered by insurance. This requires that a comprehensive system for insuring PFIs be put in place to cover the various risks that may be incurred over long term operation of the project, and not just during the period of design and construction. It will also be necessary to introduce a *minimum guarantee system* in which the public sector guarantees minimum traffic or fees for public facilities in the event that the private sector cannot cover demand risk. This type of mechanism is demanded by lenders to secure their claims in the course of project finance schemes.

- Special Exceptions for Project Agreements Between the Public and Private Sector

The biggest obstacle facing full implementation of the PFI structure is the maximum time limit on long

term debt contracts (meaning commitments to bearing obligations by the national treasury). Currently these contracts are limited to a period of five years. Accounting on an annual basis is a fundamental premise set forth in law, and is therefore difficult to overturn. Nevertheless, a statutory exception needs to be put in place to cover PFI projects. The PFI Promotion Bill in fact does set forth a special exception that extends long term debt contracts from five years to thirty.

(5) Consultant Activities in the Course of Project Management

Since the private sector takes the lead in a PFI structure, in principle the private sector should bear the risk. Nevertheless, some involvement by the public sector is also needed. The role played by the public sector extends across many areas, including drawing up plans for PFI projects, compiling bidding documents and contracts to achieve the

essential performance required, implementation and management of bidding, evaluation and selection of private businesses, approval of designs for facilities, and management of projects. These are the activities covered under **project management (PM)** and they require both specialized capabilities and expertise, and capital outlay. Construction consultants constitute the only organization of specialists that can take responsibility for project management, and these activities should be contracted by the public sector to the private sector, as envisioned by the policy of administrative reform. As downsizing in the public sector progresses, contracting to project management consultants will contribute to reducing the burden on the government employees who remain.

(6) Promoting Administrative Reform

The principle objective of the PFI



structure is the use of private sector funding, technology and expertise to improve and operate infrastructure in an efficient manner. Changing the allocation of roles between the public and private sector, and implementing an administrative reform to achieve efficient government is indispensable to successful implementation of the Japanese PFI.

In June of this year the Basic Law to Reform Government Agencies was enacted. An agency system was introduced to streamline the government bureaucracy, and a decision was made to reduce the number of full-time government employees by ten percent. With this streamlining of government functions and the movement to increase efficiency in fiscal disbursements has come a need to aggressively pursue the transfer of operations to the private sector.

7. Prospects for the PFI Market

Below we consider the prospects for the PFI market in Japan from a variety of perspectives, including the macro-policy level as well as the micro-level of businesses within the market.

(1) Macro-Prospects

The following discussion refers to the results presented in Table 4 for PFIs in the UK, on which the Japanese PFIs are modeled, to project macro trends for Japan.

The PFI approach was initially introduced in the UK in 1992 and became fully operational 1996, after a three year trial period. In the fourth year after introduction (1996), PFIs accounted for 6% of total investment in infrastructure, which rose to 14% in the sixth year, and is expected to reach 19% in the seventh year, or 1999.

In contrast with the UK, Japan faces many restrictions and challenges in introducing its PFI, and cannot expect PFIs to catch on as quickly as was the case in Britain. Nevertheless, disclosure of information, deregulation, and opportunities for the private sector to expand into areas of public sector investment will grow, and contribute to systemic reform when PFIs are introduced in full. Whilst the pace for introduction may be somewhat slower in Japan than in the UK, there is a strong possibility that PFIs in Japan will gradually approach the results that Britain has achieved.

(2) Micro-Level Prospects

The following discussion makes projections based on the results of the Survey on Intention to Introduce PFIs that was given in early July of this year to the 47 Prefectures and 12 cities designated by cabinet order (for a total of 59 local governments).

Out of the 59 local governments, 45 stated that they intended to consider introducing the PFI vehicle,

and 20 local governments gave specific examples of project sectors. These areas of infrastructure developments have been organized below:

Twenty local governments are planning to pursue PFI projects in 101 sectors, and the number of projects could be larger than this since it is likely that more than one project is being considered in each sector. Nevertheless, the private sector will not show interest in small scale projects and consequently these must be packaged into a project that is of a suitable size. In general it is difficult to utilize a project finance structure unless the project is at least ¥10 billion in scale. Thus if the assumption is made that twenty local governments have 100 PFI projects at ¥10 billion per project, this would yield ¥1 trillion in total PFI projects. Moreover, in the survey 45 local governments indicated that they wished to consider introducing PFI projects in the future, and consequently if this ¥1 trillion figure is multiplied by 2.5 times, this gives a PFI market of ¥2.5 trillion for 250 projects in the course of two to three years. In addition, Japan has 600 cities and at least 100 cities with a population of at least 200,000, which makes these municipalities suited for the PFI market. These figures make it likely that the market for PFIs involving

Table 4. Trends and Plans for Capital Expenditures in the United Kingdom

(Unit: ¥100 Million)							
Fiscal Year	93	94	95	96	97	98	99
Central Government	98	91	86	65	60	60	60
Local Government	67	73	72	64	64	70	70
National Corporations, etc.	34	42	42	44	46	46	46
Public Sector Accounts	199	206	200	173	170	179	179
PFI	1	2	4	11	15	30	42
Total	200	208	204	184	185	209	221

(Note) The Fiscal Year in the United Kingdom extends from April of each year to March of the next
 (Source) Financial Statement and Budget Report (March 1998)
 Values for 1997 are estimates, and figures for 1998 - 1999 are projected figures.

Table 5. Responses to Survey of Local Governments

	Q1	Q1-1	Q2	Q3	Q4	Hokkaido	Q1	Q1-1	Q2	Q3	Q4
Hokkaido		A, B, D			To be considered	Kumamoto		D	×	×	12, 21, 22
Aomori		B, C			To be considered	Oita		A, D			None
Iwate		B	×		9, 10, 11, 12, 13, 14, 15, 18, 19, 20, 21, 22	Miyazaki		A, B	×		Not identified at present
Miyagi		A, B			To be considered	Kagoshima		D	×	×	None
Akita		B	×		9, 12, 20, 21	Okinawa		B	×		Cannot be answered
Yamagata		C	×		Undetermined	Sapporo		B			9, 10, 11, 12, 14, 20
Fukushima		B	×		Undetermined	Sendai		B			Cannot be answered
Ibaragi		B, C			Under examination	Chiba		A, B, C			9, 10, 11, 16, 19, 20, 21
Tochigi		C	×		To be considered	Yokohama		D	×		Not yet considered
Gunma		D	×	×	None	Kawasaki		A, B, C	×		2, 7, 9, 11, 12, 13, 19, 21
Saitama		A, B			Undetermined	Nagoya		D	×	×	Not identified at present
Chiba		A, D	×	×	None	Kyoto		A	×		Not yet at a stage for consideration
Tokyo		D	×	×	None	Osaka		D		×	Difficult to reach a decision
Kanagawa		A, B			9, 10, 11, 23	Kobe		B, C			None
Niigata		B, C	×		9, 11, 18	Hiroshima		A, B			10, 12, 13, 14, 15, 19, 20, 22
Toyama		A, B	×		Undetermined	Kita Kyushu		A, B	×		1, 22
Ishikawa		B			None	Fukuoka		B, C, D			To be considered
Yamanashi		A, B, C	×		None	<p>Q1=What level of interest do you have in the PFI Bill? = Strong interest = Some interest = No interest at present × = Other</p> <p>Q1-1 = Reason for interest in PFI Bill A = Expectation that it will stimulate the economy B = Expectation that it will contribute to administrative and fiscal reform in local governments C = Expectation that it will clarify the allocation of risks and responsibilities between the government and the private sector D = Other</p> <p>Q2 = Have you established an organization to consider the PFI Bill within your agency? = Yes we already have an organization in place = We plan to establish an organization in the near future = We will consider creating an organization in the near future × = No organization has been established</p> <p>Q3 = Will you consider introducing the PFI in the future? = Yes = As of the present we are not sure, but we are interested in considering the PFI = We do not intend to introduce the PFI even in the future × = Other</p> <p>Q4 = What Facilities do you foresee as being suited to introducing the PFI? 1=Roads 2=Railroads 3=Harbors 4=Airports 5=Rivers and Streams 6=Parks 7=Water and sewage 8=Industrial water 9=Offices, lodging and similar public facilities 10=Public housing 11=Educational and cultural 12=Waste treatment plants 17=Underground walkways 18=Communications 19=Heating facilities 20=New energy 13=Medical 14=Social welfare 15=Corrections and custody 16=Parking lot 21=Recycling 22=Tourism 23=Research 24=Other</p>					
Nagano		B, C	×	×	Not identified at present						
Gifu		B, C			1, 6, 7, 8, 9, 11, 12, 13, 16, 18, 20, 21, 22, 23						
Shizuoka		A			Undetermined						
Aichi		C	×	×	1, 9						
Mie		B, C			11, 12, 24						
Shiga		B	×	×	Not identified at present						
Kyoto		B, D	×	×	Undetermined						
Osaka		D			Currently Under Consideration						
Hyogo		B, C, D	×		To be considered						
Nara		B	×		None						
Wakayama		B	×		Cannot reply						
Tottori		B, D	×		12, 21						
Shimane		A, B			7, 9, 10, 12, 13, 14, 15, 19, 20, 21, 22						
Okayama		B			To be considered						
Hiroshima		B, D			9						
Yamaguchi		A, B			1, 3, 4, 6, 7, 10, 12, 16						
Tokushima		A, B	×		To be considered						
Kagawa		A, B, C	×		None						
Ehime		A	×		Not yet considered						
Kochi	×	D	×	×	Cannot identify						
Fukuoka		B, D	×		Not yet under consideration						
Saga		B	×	×	12						
Nagasaki		D	×	×	1, 10						

(Source) *Nikkei Chi-Iki Jouhou* (Nikkei Regional Information) (July 30, 1998) “*Tokushu/Ugokidasu Nihonban PFI*” (Feature—Putting the Japanese PFI Into Practice)

local governments will reach several trillion yen, in several years, which exceeds 10% of total expenditures on public works by a considerable margin.

There are several trends that should be noted. Kanagawa Prefecture has changed its policy so that leasing is to be used for all financing of public facilities to be built. A source with the Prefecture has commented that in principle all improvement of facilities is to be done through a leasing vehicle which uses private sector funds, and the prefecture will also consider PFIs where permitted by law. This source further stated that the private sector has superior financial capacity and expertise in building facilities, and that where possible the public sector should rely on the private sector in this field.

The Osaka Metropolitan Government has embarked on a 50% cost reduction in separate projects for which subsidies are not received from the national government, and a 10% reduction for those that are eligible for subsidies, under a fiscal restructuring program. Consequently PFIs have attracted attention as an effective means to achieve the purposes of public works projects, at low cost, and in the future the pace for implementing PFIs will accelerate in projects pursued independently by municipalities.

8. Responses by Construction Businesses

Our research has revealed that many local governments are considering PFIs and that PFIs will increase in the future. We were able to confirm that the PFI approach would be applied to a wide range of sectors involving public works to

Sector	Number of Local Governments Responding That They Wished to Introduce the PFI in this Sector
Roads and railroads	6
Airport and port facilities	2
Rivers and streams	0
Parks	2
Water and sewage services, and industrial water service	5
Public facilities such as government offices and lodging facilities	11
Public housing	8
Educational and cultural facilities	8
Waste treatment facilities	12
Medical facilities	5
Social welfare facilities	4
Juvenile custody institutions	3
Parking lots	3
Telecommunications facilities	3
Heating facilities	5
New energy facilities	7
Recycling facilities	8
Tourism facilities	7
Research facilities	2
Total	101

provide public buildings, facilities and services in many areas. For the construction industry this offers encouraging prospects as local governments are considering employing PFIs in areas that are the forte of a construction company (please see Table 6).

Legal regulations are also being put into place for promoting the PFI vehicle. In May of 1998 the PFI Promotion Bill was put before the Diet in the form of a legislator's bill, and was projected to be approved at an extraordinary session in Autumn of 1998. The PFI Promotion Bill would be the basic law for the Japanese PFI, and the government agencies, as well as the local governments that would be the main promoters for the projects, are preparing specific guidelines and other particulars for implementation, in anticipation that this law will be passed. Moreover, supporting measures from a fiscal and tax perspective are entering the stage of actual planning, with a goal of put-

ting them in place during the 1999 fiscal year.

As of the present, many local governments are searching for sectors in which PFIs can be utilized, while continuing to monitor trends in the PFI Promotion Bill, and its effectiveness. Some governments have begun deliberation of projects for PFIs on a test basis. Moreover, the private sector is also searching for projects for PFIs to be funded by fiscal finance, mainly through the Japan Development Bank, and entities such as general contractors, financial institutions, consultants and think tanks are also pursuing planning and marketing activities vis-a-vis local governments and other agencies for the purpose of implementing PFI projects.

The Japanese PFI is also open for participation by foreign businesses, and we anticipate that foreign construction companies will aggressively pursue PFI projects within Japan.

Table 6. Summary of Replies to Survey of Local Governments

Local Governments With a PFI Study Committee Already in Place

The prefectures of Hokkaido, Aomori, Miyagi, Ibaragi, Mie, Osaka, Chiba, and Fukuoka; and the city of Kobe

Local Governments Currently Considering the Establishment of a PFI Study Committee

The prefectures of Saitama, Kanagawa, Ishikawa, Fukui, Gifu, Shizuoka, Shimane, Okayama, Hiroshima, Yamaguchi, Oita; and the cities of Sapporo, Sendai, Osaka, and Hiroshima

Sectors to Be Considered	Local Governments Interested in Considering the Introduction of a PFI in the Relevant Sector
Roads	The Prefectures of Gifu, Aichi, Yamaguchi, and Nagasaki; and the City of Kitakyushu
Airports and Harbors	Yamaguchi Prefecture
Rivers and Streams	None
Parks	Gifu and Yamaguchi Prefectures
Water and Sewage, and Industrial Waste	The Prefectures of Gifu, Shimane and Yamaguchi, and the City of Kawasaki
Waste Treatment	The Prefectures of Iwate, Akita, Gifu, Mie, Tottori, Shimane, Yamaguchi, Saga, and Kumamoto; and the Cities of Sapporo, Kawasaki and Hiroshima
Parking Lots	The Prefectures of Gifu and Yamaguchi, and the City of Chiba
Recycling Facilities	The Prefectures of Iwate, Akita, Gifu, Tottori, Shimane and Kumamoto, and the Cities of Chiba and Kawasaki
Tourism	The Prefectures of Iwate, Fukui, Gifu, Shimane, Kumamoto and Hiroshima, and the City of Kitakyushu