

Basically, the Statement covers arrangements between public and private sector entities to deliver services. i.e. infrastructure, roads, highways, bridges, power grid, desalination plants, electric power plants, artificial sun, communal solar energy projects, horizontal/zig-zag oil drilling, communal windmills etc.

In the SCA, the risks and benefits of the underlying property may be shared by the public and private sector entity. Typically, the public sector may be a grantor. The issuance discusses revenue recognition from the inflow of resources.

Guarantees/Commitments made by the public sector are set forth as part of the SCA. The public sector may guarantee the debt in the event of default. Default can happen in a number of ways. i.e. financial or impossibility to perform

The builder of a dam in an earthquake zone may face irreparable damage in the middle of construction, as a result of underestimating the "overturning moments".

The outsourcer in an area of Tsunami storms may face the major destruction of facilities due to the vagaries of nature. Oil drilling companies off the Gulf Coast routinely encounter significant repairs of damaged equipment due to hurricane activity.

Traditionally, the public sector entity may hold an equitable interest or a joint venture. SCA is an asset reported by the grantor if it controls the property.

The underlying property of the grantor may be either an asset or liability reported at the property fair value. Contractually determined inflows of resources received by the grantor should be recognized as received by the grantor or as earned under the life of the SCA beginning at the commencement of the concession term or when the property is operational (fully).

Inflows are earned when the grantor provides operational access to the property amounts received in advance of providing a commensurate level of access to the property reported as a liability.

Legal Principles Not Set Forth In Original Draft:

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The Statement does not reference legal doctrines, per se. Nevertheless, certain basic legal doctrines will apply. i.e.

The “Principle of Comity” may make the grantor’s laws dispositive as long as the laws are consistent with accommodating nations, trading partners or business partners. The contract must delineate whose laws are in operation with regard to the implementation of the ongoing contract.

The “Act of State Doctrine” is a judicially created doctrine that states the judicial branch of one country should not examine the validity of public acts committed by a recognized foreign government with regard to business activity or any activity within its own borders. The contract should provide for foreseeable conflicts in the conduct of the arrangement; such that, the discretion of the host country is not invoked adversely to the operator.

The Doctrine of Foreign Immunity immunizes foreign nations from the jurisdiction of American Courts. A contractor or operator must be satisfied as to the proper venue to seek redress for major contractual non-compliance, non-cooperation or outright expropriation.

The contract between the Public Service Organization and the operator must be clear as to the choice of language and the choice of forum to designate dispute resolution, local court jurisdiction or forced arbitration venues. The governing law with respect to the contract performance should be set forth clearly. In cases where the performance arises out of intellectual property, the governing law may be the United States Patent Law or European Patent Office.

Civil disputes can be settled in the International Chamber of Commerce in order to avoid multi-country litigation. Section 1 of the Sherman Act provides for extra-territorial application of United States Antitrust Laws.

These laws may apply where alleged violations have substantial impact on the Commerce of the United States, price fixing, tie-in contracts.

The International Union for the Protection of Industrial Property (1883) guarantees non-discriminatory treatment of patents. Examples of protected instrumentalities will be provided in the energy area. i.e.

- o Artificial Sun or virtual power  
(multi-nation project undertaking)
- o Horizontal drilling in places like the Bakken Reserves of the Dakotas
- o Unique windmill blade designs that help to deflect noise levels
- o Unique geothermal energy conversion in volcanic areas
- o Easy to maintain solar energy voltaic cells and instrumentalities
- o Waste recycling processes that create diesel fuel
- o Coal gasification processes and certain thermodynamic improvements
- o Improvements to the Carnot engine assumptions of energy efficiency

Critique or Analysis ( pg. )

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pp. 8 The PPP is a public private partner association to complete new infrastructure. The definable mission is to deliver public service asset infrastructure or a public facility or service. The risks are shared between the public and private sector. Construction risk involves defects in materials, construction delays, structural integrity, technical deficiencies, health risks and major non-compliance with reasonable qualitative standards.

For instance, structural integrity may relate to the ability of a dam retaining wall to sustain a reasonable overturning moment during routine storm activity. Health risks may attain in the construction of a nuclear power plant.  
i.e. control rod deficiency

Citizen Demand Risk deals with the local acceptance of the project.

Operating and maintenance risks are real. For instance, there are risks of material price increases, shortages i.e. (copper and vital minerals), natural disasters and Acts of G-d, deferred

maintenance and obsolescence.

A plant may be deemed inoperable due to a local change in how the law is applied to older facilities. A major coal burning plant may require significant new scrubber enhancements to operate under the new engineering code.

The residual value risk is the difference between the market price of infrastructure and the expected original market price.(pp. 9)

Financing Risk involves the risk that the financing cannot be obtained or the interest rate is too high or there are major currency fluctuations.

The Public Private Partner may be used to leverage benefits of the private sector entity generally not available in the public sector. The objective is to achieve improved value for the money.

For instance, there is an improved ability to deliver new or renovated infrastructure. i.e. better materials like solar cells, a longer MTBF (mean time between equipment failures), energy efficiencies greater than the Carnot Energy of 51%, bridge materials that don't oxidize as readily, a material with a higher breaking point or elasticity.

The private sector entity gets the asset-based taxable deduction and tax benefits resulting in lower charges to the public sector entity. The PPP arrangement may help in meeting fiscal targets and operational deadlines otherwise unobtainable except at significant cost.

The public sector may pay balloon up front costs with reduced streams of periodic payments. The UK and Australia utilize the PPP to upgrade infrastructure and public facilities needs.

Risk and responsibility grows in relation to the growing involvement of the private sector. (pp. 10) The PPP may be utilized to emulate privatization or builder/owner operation. A PPP may be employed to deliver modern electronic infrastructure and the internet superhighway to Iraq.

For instance, the contractor could install the data centers, municipal accounting systems to track oil revenues, resource sharing via operations research algorithms, government operations and communications to a decentralized constituency of users in

the Sh'ia, Kurd, Sunni and mixed communities.

A PPP arrangement may be utilized to design and build via the private sector ability to collect food waste, recycle and manufacture diesel fuel organically.

The Operations Concession Arrangement provides for the private sector entity to formulate public services through the existing infrastructure assets or private facilities. The private sector assumes the obligation to provide the service in accordance with the public service entity requirements.

Public service entities may make payments to private providers in response to a completed performance.

In the "Design, Build, Operate and Maintain" scenario, the private entity has the construction risk, operation and maintenance. "Build, Own, Operate and Transfer" is the BOOT methodology. The private entity owns the arrangement until the completion or contract term.

Privatization transfers the infrastructure to private sector entities via a sale. The public sector entity divests itself of responsibility for the property and related delivery of the service.

In the Public, Public Partner (pp. 14), the government business enterprise may be the operator. i.e. a toll road The State is the grantor and the local toll road is the operator.

Conceptually, this organizational structure could be seen in Iraq. i.e. The government of Iraq is the grantor and the various subgroup constituencies are the public partners. i.e. Sh'ia, Kurds, Sunni and mixed communities.

The workable model could be formulated under a BOOT arrangement; whereby, the transfer is affected to the public entity after the workable model has been tested and implemented in the preferred mode of operation.

In the financial reporting of infrastructure and public facilities, the risks, responsibilities, benefits and control of property are shared in varying degrees between the grantor and operator. The key question is the one involving substance over form.

In the UK, economic risks/rewards are the basis for accounting for the property in Private Finance Initiatives. ( P F I )

Specified risks are as follows:

- o demand risk which is greater or lower than predicted as in demand pull inflation
- o 3rd party revenues show that the revenues belong to the operator
- o Which party determines ultimately how the PFI is to be carried out ?

These risks could relate to the legal superstructure discussed earlier.

i.e. Principles of Comity, Act of State Doctrine, Contract Details etc.

- o Potential changes in future costs to the GRANTOR

Generally, the party bearing the risk gets the benefit of the residual value. Construction risks may be excluded due to starts before the concession period. Construction risk can deal with late delivery, substandard product/ performance, cost over-runs, technical deficiencies or environmental risks.

Some of these risks can be very real. Environmental risks of hurricanes, earthquakes, Tsunamis can halt projects into the foreseeable future. Major cost over-runs can be incurred due to material spikes in the cost of energy. (pp. 20)

In Availability risk , the operator bears the risk of insufficient management, strikes, work slowdowns, outsourcing risks due to language barriers and unanticipated Acts of G-d, inefficiencies and downtime in training or even employee turnover.

Demand risk may be due to the business cycle, new market trends, changes in user preferences, changes in the political climate or technical obsolescence. The fixed price contract transfers the construction risk to the builder. (pp. 21)

The current economic environment has demand risk due to investor uncertainty with regard to the predictability of energy prices. Auto owners determine new market trends with

regard to manufacturing energy efficient cars.

Government users of electricity may determine whether or not solar energy is applied on a wide scale basis throughout government buildings and offices. Tougher environmental standards will mandate technical obsolescence.

In the SCA, the operator is the service provider. (pp. 23) With respect to South Africa, possession of the property at the end of the arrangement determines the financial reporting. This applies to the grantor. A finance lease may be inferred if all risks and rewards are transferred as incidents of ownership. Ultimately, control and risks/rewards are necessary for the grantor to report the SCA as an asset.

Control encompasses whether or not the purchaser (lessee) has the right to operate the asset or control physical access to the underlying asset. The purchaser is expected to benefit from the output or utility generated by the asset during the term of the arrangement. Control over residual interest is dispositive with respect to establishing control for financial reporting purposes.

The Board believes that the grantor controls when the grantor regulates conditions which the service operator must satisfy with the underlying property, to whom provided, pricing and grantor control of the residual interest. I don't always agree.

Control over delivery of the service does not necessarily reside with the grantor. For instance, the patent owner of a horizontal drilling process controls whether or not provable oil reserves can be exploited effectively or in a cost efficient manner. Without the horizontal drilling process, no oil exploration is commercializable in certain areas of the USA like the Bakken oil reserves in the Dakotas.

A patent on horizontal drilling must show unobviousness in areas; such as, successful application of drilling techniques previously thought to be impractical, too costly or unworkable.

The "Artificial Sun" emulates virtual power utilizing nuclear technology. A virtual power reaction and harnessing energy may provide an operable result where other processes either failed or were unworkable.

Therefore, the patent or patent group on the

“Artificial Sun” only provides operability through the efforts of the patent owner or consortia of individual patentees or multiple dependent patent holders.

Certain types of solar energy cells provide significant operability under weather conditions that would deteriorate other materials/ processes or arrangements rendering them inoperable or impractical to maintain.

The innovation might involve chemical processes, physics enhancements in the management of light or electrical arrangements that allow for efficient power throughout.

Wind mill technology is subject to patentable enhancements in various areas; such as, minimization of noise or drone, electrical interference or materials resistance to oxidation. Variable positioning of the wind mill apparatus may provide more efficient electrical power thereby enhancing patentability and exclusivity to the owner.

A windmill farm may be subject to local zoning variances by municipalities. Therefore, local municipalities may become PPP or Public Private Partnerships to deliver a public service or power grid enhancement otherwise unavailable.

Countries or portions thereof in a developmental stage may benefit from PPP arrangements in order to import the technology or know-how otherwise unavailable. For instance, inland China has had problems in importing the coastal technologies to inland China and places like Tibet.

A multiply dependent PPPP arrangement can be crafted from the National Government to the Beijing Municipal People’s Government to the District People’s Government to the District Government Arms and neighborhoods.

The applicable asset is recognized when probable future economic benefits or costs are determinable. i.e. provable reserves or oil reserves that can be extracted without huge costs. (pp. 37)

In some SCA, the grantor pays regularly and construction is disaggregated from the service. In these instances, preparers of financial statements may look to the finance lease guidance. IPSAS 13, 17 ( pp. 39)

In cases where the proposed control criteria has not been met in the SCA, the grantor



should not classify the accounting as an asset. Instead, the SCA related outlays should be expensed as incurred. This action is similar conceptually to the service contract. When the grantor does not control the residual interest, a BOO arrangement is in order. i.e. the builder builds , owns and operates the underlying property. BOO meets the definition of a lease. ( pp. 46)

Newly constructed SCA are considered BOOT.  
The operator builds, owns, operates and transfers ownership at the end of the arrangement.  
The grantor pays a balloon payment at the end.  
(pp.47) An example of this would be a geothermal conversion process built for a specific community. A grantor may guarantee the debt of an operator in case of default or guarantee minimum revenues for the operator's permission to apply the technology in a specific governmental context. ( pp. 50-52)

In cases where the IAS 39 on financial guarantee contracts aren't met, IPSAS 19 provides for contingent liabilities where:

- o the entity has present obligations resulting from a past event i.e. a major Act of G-d destroying the subject matter of the contract
- o a probable outflow of resources embodying economic benefits or service potential requisite to settling an obligation
- o reliable estimates can be made

I concur.

Probable factors in measuring a liability include:

- o Grantor guarantee of the debt and there is an unconditional obligation and a conditional obligation to repay the debt if the operator defaults.

The Board believes that IAS 39 financial guarantee contract theory governs to measure the financial liability related to the guarantee in the grantor's financial statements.(pp. 54)

I concur.

[ Grammatical pp. 179 In. 5: "different than should be different from " ]

Revenue sharing may be BOOT for an indoor arena where the grantor gets a fixed royalty. That is, a transfer may occur at some point later in the contract.

I believe that a transfer may not occur if

the subject of the maintenance is so complicated that a reversion to a patent protected process is necessary into the indefinite future.

Revenue recognition may occur when milestone goals are reached. i.e. An "Artificial Sun" virtual power has been tested and a workable model has been put into place. A toll road is another classic example where a threshold toll revenue has been reached; such that, the probability of future revenue flows to the grantor is determinable objectively with a significant probability of future occurrence on a continuous basis. (pp. 55,56)

Grantors should recognize revenue from the SCA revenue sharing provisos as earned after a contingent event is deemed to have occurred. ( pp. 57 ln. 190)

Contractually determinable inflows of the grantor as part of the SCA are to be recognized as revenues by the grantor as earned over the SCA life. (pp. 59)

Power conditional ownership of a majority interest should relate to a specific majority interest of at least 51% or an objectively determinable control criteria direct or indirect of an affiliate's voting common stock evidencing the controlling financial interest in a parent/sub relationship.

A parent's control of a sub may be indirect. A less than 50% or majority owner may control an affiliate if the remaining stock is widely scattered among many hundreds or thousands of shareholders/stakeholders who don't attend shareholder meetings or vote by proxy.

Effective control of an investee may be possible if the investor corporation management own a substantial number of investee shares or solicits proxies from the investor's or grantor's shareholders. ( if the grantor is a corporation ).

Intercorporate transactions between the grantor governmental levels are always a concern where the grantor is theoretically a multi-level governmental entity. i.e. federal, state, municipal, neighborhood

In cases of major intercorporate or inter-governmental transactions, the accountant must look to the substance of the transaction to determine control or even constructive expropriation.

Restricted funds may account for resources available for current use but expendable only as authorized by the grantor of the scarce resources. Thus, a special revenue fund may be created for government use.

The special revenues may be created for specific operating purposes or additions to property, plant or equipment. For instance, a BOOT arrangement may transfer ownership at some point to the grantor. Subsequently, the grantor may create a special revenue fund for routine operational purposes like toll road maintenance.

Quasi-reorganization in bankruptcy proceedings may require a new mission for the operator due to unforeseen financial difficulties, Acts of G-d, unavoidable obsolescence or unprovable oil reserves or the existence of oil reserves which are too costly to extract in a cost efficient manner.

There are various cost accounting considerations in formulating policy for service concessions. For instance, changes in overhead may vary greatly due to energy price increments.

Controllable costs are influenced directly by the operator as approved by the grantor within a governmental relevant range. Reasonable replacement costs may not be controllable in major disasters or Acts of G-d where the subject matter of the contract disappears or is irreparable by any reasonable estimate.

The concept of a learning phase and steady state phase may vary considerably depending upon the position of the product to be engineered within the technological learning curve hierarchy. The "Artificial Sun" virtual power is in a relatively nascent stage of development. After a decade or so of experimentation, the input to the nuclear reaction may be less than the energy output. At that point, the technology will approximate feasibility and practical commercial application.

A technologically obsolescent piece of equipment will have a much higher depreciation rate than a newer piece of equipment. Equipment-replacement decisions can be complicated by unequal lives of equipment that competes technologically.

For example, the elongated blade of an early windmill model may have a shorter productive life than a brand new blade which is

technologically up-to-date.  
Generally, some residual value must be computed for comparison purposes.

A market-based transfer pricing may be required for intergovernmental transactions involving multiple segmented levels of government grantors with a master grantor at the top of the chain. The master grantor is the national government.

At times, the revenue sharing formula may be determined algorithmically. For instance, assume a rational energy revenue/resource sharing formula for the Iraqi Kurds, Sh'ia, Sunni and mixed communities.

Algorithmically, the total provable reserves and applicable revenues could be allocated scientifically by linear programming methods. These linear programming methods would take the current provable oil production and allocate it amongst the various component grantor constituencies. The delivery of the refined oil could be allocated by the Transportation Linear Programming Algorithm.

The optimum labor intensive tasks could be assigned utilizing the Assignment Model in the Operations Research Methodology.

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