16.1 Checklist for Operation and Maintenance Agreement

Annex to Operation and Maintenance Agreement: Contract 16 in the Commonwealth Model Contract Series

**Model Contracts for Infrastructure, Extractives and Energy Industries in Commonwealth Countries**

The Commonwealth Secretariat recognises the need for standardised contracts within the infrastructure, extractives and energy industries across its member countries.

The lack of uniformity in these contracts has led to inefficiencies, imbalances and loopholes that do not serve the best interests of the member countries. To address this issue, the Secretariat is developing model contracts that foster fairness, balance and sustainability in investment relationships, while protecting the interests of governments and citizens.

The core purpose of this standardisation is to consolidate a comprehensive array of infrastructure contracts, facilitating easy access for relevant stakeholders. By providing a singular point of access, it eliminates redundancy and ambiguity, allowing government officials and authorised parties to efficiently source and acquire requisite contracts. This strategic initiative is poised to revolutionise and improve the procurement process within Commonwealth member countries.

This series of model contracts will serve as valuable resources for government lawyers, aiding them in drafting and reviewing foreign investment projects and related contracts. By promoting fairness, balance and sustainability, these model contracts will contribute to the overall development and economic wellbeing of Commonwealth member countries.

Moreover, the establishment of this central repository underlines the commitment of Commonwealth member countries to fostering a conducive environment for sustainable investments.

To deliver this suite of model contracts, the Commonwealth Secretariat has constituted a working group comprising of officials nominated by 19 member countries who are leveraging their expertise, and working with a designated expert, to conclude the project.

## 16.1 Checklist for Operation and Maintenance Agreement

## Annex to Operation and Maintenance Agreement: Contract 16 in the Commonwealth Model Contract Series



This work is adapted from PPP in Infrastructure Resource Center for Contracts, Laws and Regulations (2024), ‘Checklist for Operation and Maintenance Agreement’. <https://ppp.worldbank.org/checklist-operation-and-maintenance-agreement>

© Commonwealth Secretariat 2025

This work is licensed under Creative Commons Attribution 4.0 International.

This publication is not intended to be, and should not be used as, a substitute for taking legal advice in any specific situation, and does not create a contractual or other legal relationship between the authors, or their affiliations, or the Commonwealth Secretariat, and any other parties.

Views and opinions expressed in this publication should in no way be attributed to the institutions to which they are affiliated or to the Commonwealth Secretariat.

Wherever possible, the Commonwealth Secretariat uses paper sourced from responsible forests or from sources that minimise a destructive impact on the environment.

Published by the Commonwealth Secretariat.

**16.1 Checklist for Operation and Maintenance Agreement**

The purpose of this checklist is to identify the key areas to be considered in reviewing and drafting an operation and maintenance agreement where the agreement is a standalone agreement (i.e., the operator is contracting directly with the grantor) rather than part of a concession arrangement where the obligations of the concessionaire during the operating period are sub-contracted to an operator. The checklist should also be useful in identifying areas which have not been addressed or require further attention.

Contents

[General points 3](#_Toc209713446)

[Terms of agreement 3](#_Toc209713447)

[Operator’s obligations 3](#_Toc209713448)

[Pro-poor initiatives 4](#_Toc209713449)

[Payments and incentives 4](#_Toc209713450)

[Liability and liquidated damages 4](#_Toc209713451)

[Authority's obligations 5](#_Toc209713452)

[Exclusivity 6](#_Toc209713453)

[Warranties 6](#_Toc209713454)

[Tariffs 6](#_Toc209713455)

[Who bears the risk of events post-contract award 6](#_Toc209713456)

[Employees 7](#_Toc209713457)

[Reporting 7](#_Toc209713458)

[Monitoring of performance 7](#_Toc209713459)

[Financial monitoring 7](#_Toc209713460)

[Termination/suspension 7](#_Toc209713461)

[Expiry of agreement 8](#_Toc209713462)

[Force majeure 8](#_Toc209713463)

[Anti-bribery and anti-corruption 9](#_Toc209713464)

[Sub-contracting 9](#_Toc209713465)

[Assignment of agreement 9](#_Toc209713466)

[Insurances 9](#_Toc209713467)

[Intellectual property and confidentiality 10](#_Toc209713468)

[Dispute resolution 10](#_Toc209713469)

[Priority of documents 10](#_Toc209713470)

[Performance security 11](#_Toc209713471)

[SCHEDULE 1: OPERATOR’S OBLIGATIONS 11](#_Toc209713472)

[SCHEDULE 2: FUNDAMENTAL REQUIREMENTS WITH WHICH
THE OPERATOR MUST COMPLY 11](#_Toc209713473)

[SCHEDULE 3: AUTHORITY'S OBLIGATIONS 12](#_Toc209713474)

[SCHEDULE 4: EVENTS ENTITLING THE AUTHORITY TO TERMINATE THE AGREEMENT 12](#_Toc209713475)

[SCHEDULE 5: CONTROLLING THE REIMBURSABLE ELEMENTS OF AN OPERATOR'S FEE 13](#_Toc209713476)

[SCHEDULE 6: INCENTIVISING THE OPERATOR 14](#_Toc209713477)

# **General points**

1. Are there any areas of the agreement which need to be checked or developed by a technical adviser been identified, e.g.:
2. scope of operating and maintenance services;
(b) scope of authority's obligations;
(c) performance standards to be achieved;
(d) all limits on liabilities;
(e) the level of any liquidated damages; and
(f) incentive mechanisms?
3. Is the operator a significant entity? If not, is it supported by adequate performance guarantees or will there be a minimum level of paid up capital in the company? Is the operator a local or foreign company? If it is a foreign company, is there a way of ensuring that it can be held accountable for its actions?
4. Is the grantor a significant entity? If not, is it to be supported by a state or other guarantee?
5. Is the grantor allowed to delegate responsibility as proposed under the agreement?
6. Are there any other legal impediments to the agreement being entered into?

# **Terms of agreement**

1. If there is any capital investment being undertaken by the operator, then the operator would expect the term of the contract to be at least five years, more likely 8 or more years.
2. If the term is more than 5 years, is there to be a review process during the term of the contract to review performance, investments etc., or this to be ongoing?
3. If there is any financing to be provided by a third party, is the term of the agreement at least as long as the term of the funding? Does the agreement entitle the grantor to terminate for convenience before the end of the original term (this could difficult for lenders).
4. Are there any usual conditions precedent to the agreement which would have the result of the agreement not coming into force? Should there be some conditions precedent included in the agreement to ensure that the operator is not obliged to perform its obligations before it can in fact do so – e.g., permits to start operating, access to facilities, work permits for key foreign personnel.

# **Operator’s obligations**

1. What are the operator’s obligations? See Schedule 1 for a list of what might be included within those services.
2. Service Area to be well defined – the geographic limits of the operator’s responsibilities should be clearly identified. If different types of service are to be provided, are the service areas the same for each?
3. Clear definition of performance standards to be achieved – and whether performance standards are predicated on other factors, e.g. quality of inputs (for example, in the case of water treatment, the quality of raw water), who bears the risks of other exceptional circumstances such as force majeure and how this risk is borne. Are there any prescribed remedies to non-performance, such as liquidated damages?
4. Where meters are installed/ to be installed, is it clear who is responsible for the meters, their accuracy, the consequences of inaccuracies?
5. Are standards of operation and maintenance clearly set out? Does the agreement contain an obligation to comply with certain fundamental requirements, such as those listed in Schedule 2? Is there a maintenance schedule? Is it assumed that certain assets will be replaced as part of maintenance, and included in the cost? Is the operator required to make some replacements towards the end of the agreement? Is there a mechanism to protect the assets to ensure that they are not run-down when they are handed back at the end of the agreement? What is the operator’s responsibility for normal wear and tear and unexpected wear and tear?
6. Does the agreement provide a mechanism allowing for additional services to be included within the scope of the operator’s responsibilities (“variations”) and a procedure for resolving any disputes as to the costing of those additional services?
7. Is operator responsible for financing any capital investment? If not, is the operator to oversee or make recommendations for capital investment programme?
8. Is the operator required to have an interface with customers? Is the operator is to issue bills and collect revenues, is this permitted under law?
9. What licenses and other permits does the operator need to obtain? Will the government or grantor give any assistance in obtaining these permits?
10. What are the operator’s responsibilities in relation to spare parts?

# **Pro-poor initiatives**

**Ge**neral provisions encouraging operator to reach poor communities will prove unsatisfactory unless there are details as to areas to be served, service levels (i.e., should there be a household connection, community standpipe, bulk connection with local supplier then supplying beyond that via hoses, pipes etc.), billing methods, involvement of local community etc. It should also be clearly indicated if performance standards are to be reduced or different in these areas to meet local needs.

# **Payments and incentives**

1. Is the operator to be paid a fixed fee or on a reimbursable basis or is he to be paid by a combination of these two approaches?
2. Is any part of the operator's fee subject to escalation?
3. In the case of the operator being paid on a reimbursable basis in whole or in part, what safeguards exist in the agreement to prevent this procedure being abused by the operator? For examples of how an authority might protect itself, see Schedule 5.
4. Does the fee provide an adequate incentive upon the operator to perform? See Schedule 6 for examples of how the operator might be incentivised. Also, when considering pro-poor issues, create detailed incentive mechanisms for provision to poor areas (even where this involves alternative technology, local billing arrangements, grants for connections etc.)
5. What is the time for payment? What interest is payable by the authority if there is delay in making payment? Is there any legal constraint on interest penalty payments?
6. Is the authority entitled to exercise rights of set off, for example in the case of defective services?
7. Is the authority responsible for any taxes payable by the operator? If the authority is responsible for payment of such taxes, which might be appropriate in an overseas project, does the agreement expressly exclude penalties payable by the operator and is there provision for the operator to reimburse to the authority any tax credits subsequently recovered?

# **Liability and liquidated damages**

1. What is the regime for non-performance by the operator?
2. Are there to be cure periods within which the operator must remedy a breach, with failure to do so resulting in a right of the authority to terminate, etc.? Is the operator to re-perform any defective services and to repay or replace any components damages as a consequence of the default?
3. Are liquidated damages to be imposed? If so, in many jurisdictions these need to be a genuine pre-estimate of loss and have no element of penalty.
4. Are there to be limitations on liability – per single claim and in aggregate? Are there any exceptions to these limitations, such as willful default?
5. Is there an exclusion of consequential loss? Are liquidated damages included as exceptions to any general “exclusion of consequential loss” rule?
6. What is to happen about liabilities to third parties and breach of laws?
7. Is there to be any indemnity where liability is no fault of the operator? It is unlikely that the operator will be able to be indemnified against criminal liability as many jurisdictions will not uphold provisions of this sort.
8. What environmental laws are in place and what is the consequence of environmental pollution – can the operator face fines?
9. If the operator fails to carry out any services for which he is responsible or re-perform any defective services, does the agreement entitle the authority to employ a substitute operator to perform these services and then for the authority to recover the costs of doing so form the original operator?
10. Is there an exclusive remedies clause (i.e., that provides that liquidated damages are the exclusive remedy for a certain default)? See more on liquidated damages below.

# **Authority's obligations**

1. Are all of the obligations of the authority within the authority's control? (See Schedule 3 for a list of what such obligations might include.)
2. What does the agreement provide for regarding the following matters:
3. responsibility for local taxes and, in particular, changes to local taxes;
4. responsibility for obtaining licenses/permits ;
5. change of law (the operator should possibly be obliged to take into account any laws which are known to be coming into effect or which are notified to the operator before the entry into the agreement)?
6. Authority’s data - What are the authority’s obligations regarding the condition of the assets and performance of the facilities immediately prior to take-over by the operator? A key issue for an operator coming into an agreement of this sort, particularly if it bears risk of performance and some risk of the asset condition, is whether it can rely on the data as to asset condition and performance provided by the authority and on which it based its bid:
7. If the information is found to contain inaccuracies, where will the risk of this lie?
8. Is the operator required to make its own enquiries and satisfy itself as to the condition of the assets and the performance?
9. This is often difficult for the operator to accept as information may not be forthcoming or may only be able to be evaluated once the operator is operating the facilities. Is there to be a benchmarking period during which information is to be verified? Go to Checklist on Benchmarking Period for more information.
10. Granting access to facilities - The operator will need unimpeded access to facilities of system and will also need rights to lay pipes on third party lands etc.
11. Is the operator to be granted land rights over the facilities – are these permitted under local law?
12. Which party bears risk of obstruction by third parties?
13. Need to ensure that authority has access when needs it – will this be on notice?
14. Will spare parts be transferred to operator?

# **Exclusivity**

An operator will be keen to be granted exclusivity in a service area and ensure that other parties cannot provide the same service in that area. However, it may be that the service area is widely defined to cover dwellings that are not served by the operator and rely on third party provision, including poorer areas where the operator is unable or unwilling to connect people. Care should therefore be given by the authorities to ensure that those people are not deprived of alternative provision – even if alternative provision is only permitted for a limited period until the operator is able to make a suitable connection.

# **Warranties**

1. A contract often contains warranties as to each of the parties – these are statements that they are validly constituted, have the rights and powers to enter into the contracts, have entered no material litigation etc.
2. If the authority is warranting the information provided to the operator, then this will be set out here.
3. Warranties are made as at a certain point in time – and can be repeated at certain times – but it should be made clear whether the warranties are made at contract signature – whether they are repeated on the Effective Date of the contract – and whether they need to be repeated at any other time. If there is no reference to when the warranties are given, they are likely to be deemed to be made at the time the parties entered into the agreement.
4. The parties should consider what should happen if there is a change in circumstances that would make the warranty incorrect – should the party having given the warranty be required to notify the other of the change?
5. Warranties should not be confused with covenants – which are obligations of a party to do or refrain from doing something. For example, the authority may covenant not to enter into similar arrangements within the service area with a third party – these obligations are for the duration of the contract and are not given as of a specific date, unlike warranties.

# **Tariffs**

Are tariffs at an appropriate level to cover the cost of operations, maintenance and fees? If not, are there to be tariff increases or subsidies? Even where operator does not bear risk of revenues, this will be a factor in determining potential for public unrest etc.

# **Who bears the risk of events post-contract award (some of these are discussed elsewhere)**

1. raw water/ wastewater not meeting specification that can be treated by facilities (e.g. containing pollutants/ hazards);
2. authority information proving incorrect – e.g., re collection rates, unaccounted for water, poor water quality or asset condition;
3. changes in law;
4. force majeure events;
5. failure to increase tariffs in accordance with contract;
6. emergencies – does the authority want the right to take over the facilities in the event of an emergency;
7. variations to the services – does authority want right to introduce changes?

# **Employees**

1. Will existing employees of Authority be transferred or seconded to operator? Are the employees unionised?
2. Is it possible to transfer employees?
3. What are pay levels of employees – do these follow civil service pay scales, is it possible to introduce bonus schemes?
4. If the system is to be made more efficient and efficiency requires reduction in personnel, is operator free to reduce employee levels or is there to be a system or retirements, voluntary redundancies, or transfer of employees to different government agencies? Who is to bear cost and risk of these activities?
5. How are unions to be engaged? It is important to engage unions at an early stage if redundancies are to be proposed – experience has shown that if unions are not engaged in the process from an early stage the project can be adversely affected or delayed and can lead to the project failing.

# **Reporting**

1. What reports need to be prepared on regular basis?
2. What is to be covered by the reports – this will depend on the level of involvement that the authority wishes to have in the services.
3. How often should accounts be prepared?
4. Will these accounts be audited?
5. Is there to be an inventory of spare parts?
6. Is there to be an asset register? Does this already exist? If not, how long will the operator be given to prepare one?
7. Does the agreement provide for the authority (and where relevant, lenders) to have rights of access to the facilities and to documents of the operator for inspection and audit purposes?

# **Monitoring of performance**

1. Who is to monitor operator performance – is this to be the authority, or an independent expert?
2. If it is to be a regulator or a government department, does it have sufficient capacity and resources to monitor effectively? Is the entity sufficiently objective for a private operator to be comfortable with its decisions. What are to be its powers?
3. What is to be the method for monitoring?

# **Financial monitoring**

1. Is this to be carried out by a regulator, government department, the awarding authority itself?
2. If it is to be a regulator or a government department, does it have sufficient capacity and resources to monitor effectively? Is the entity sufficiently objective for a private operator to be comfortable with its decisions. What are to be its powers?

# **Termination/suspension**

1. Does the agreement provide for the authority to be able to terminate the agreement in the case of those events listed in Schedule 4?
2. Is the operator entitled to terminate the agreement for any reasons in addition to:
3. authority's unremedied breach (check the agreement provides for prior service of a notice and for a period within which to remedy the breach);
4. prolonged force majeure;
5. prolonged suspension; and
6. insolvency?
7. Does the agreement provide for satisfactory cure periods in the case of default of the authority before the operator is entitled to exercise its termination rights?
8. If the agreement is terminated, in what circumstances is the operator entitled to loss of profits? Are there any limits on the level of lost profits which are recoverable? If the authority wishes to retain a right to terminate for convenience, the operator is likely to seek compensation for loss of future profits to be made on termination.
9. Upon termination, does the agreement provide that the operator is entitled to take over any sub contracts it requires and be transferred materials, equipment, plans, intellectual property etc.?
10. Does the agreement provide for the operator to handover the plant in a certain state following termination?
11. Does the agreement oblige the operator to cooperate with a successor operator and to handover to that operator all relevant information, equipment and materials?
12. What is to happen to employees on termination/ expiry?
13. Does the agreement give the authority the right to operate the facilities using any of the operator's personnel following termination and prior to the appointment of successor operator, subject to reimbursement of the employment costs and there being a time limit applicable to such obligation?
14. Does the agreement entitle the authority to suspend the agreement?
15. Is the operator entitled to terminate the agreement following prolonged suspension? If so, after how long?
16. What is the cost to the authority of suspending the agreement?

# **Expiry of agreement**

1. Should the assets be handed back on termination in a particular condition?
2. What is to happen to employees?
3. Will operator be required to work alongside successor for a period?

# **Force majeure**

1. How widely is force majeure defined? (Consider excluding events reasonably foreseeable by an experienced operator.)
2. Where operations relate to a whole network as opposed to a single plant, the likelihood is that a force majeure event will not result in a total breakdown in service. However, force majeure clauses are often drafted assuming that the consequences will be total breakdown and do not deal with the circumstances where the breakdown is partial.
3. If a force majeure event arises, is the operator entitled to any monetary claim (e.g. for increased costs) or is he only relieved of liability? Is the operator still to be paid any part of his fee if he is unable to operate the plant?
4. Does the agreement provide for termination for prolonged force majeure? If so, after how long and at whose option?
5. Do the periods of prolonged force majeure need to be continuous periods or are cumulative periods occurring within a fixed time period also taken into account?

# **Anti-bribery and anti-corruption**

In the event that this contract was procured, facilitated, awarded and/or otherwise generated through corrupt or other improper practices, in whole or in part, the contract should provide that any agreement will be deemed to be void ab initio.

# **Sub-contracting**

1. Is operator permitted to subcontract?
2. If so, are there to be restrictions on parties to whom it may subcontract?
3. Are clear procurement procedures to be set out in the contract?
4. Does the agreement provide for any subcontracts to be freely assignable to the authority?
5. Does the agreement provide for all sub-contracts required by the authority to be assigned to it upon termination of the agreement?

# **Assignment of agreement**

1. Parties will need to consider whether to allow assignment of whole or part of the contract to a third party and if this is permissible, whether to impose conditions on the standing of the assignee and the place of registration of the assignee.
2. Is the agreement freely assignable by the authority? If not, is it at least assignable by way of security to any relevant lenders?
3. Is any assignment of the agreement by the operator subject to authority consent?

# **Insurances**

[for more information on insurance in infrastructure projects, see Insurance Checklist]

1. Care will need to be given that the appropriate levels and types of insurance are taken out. Due diligence will need to be made to determine what insurance is available in the host country.
2. Does the agreement provide for any insurances to be taken out by the operator to include the authority and the lenders as co insureds?
3. Does the agreement provide for a waiver of subrogation in respect of the authority and the lenders?
4. Are the limits of the insurance and the limits of any deductibles appropriate?
5. Does the agreement impose an obligation upon the operator to comply with the terms of all insurance policies?
6. Are there provisions in the agreement entitling the authority to inspect the operator's insurances on an ongoing basis, to receive evidence that premiums have been paid, to approve the identity of the insurers and the terms of the insurance and to take out insurance at the operator's costs in the event that the operator is in breach of his insurance obligations?
7. Does the agreement provide for business interruption insurance covering the loss of production due to delay caused by force majeure or authority's risks.
8. Does the agreement provide that any insurance shall not operate as an exclusion of liability for the operator?
9. Does the agreement provide for non-vitiation insurance to be taken out or address this risk another way?

# **Intellectual property and confidentiality**

1. What licenses of intellectual property is the operator obliged to provide in respect of the operation and maintenance of the facilities, during the agreement, and post termination? The authority should be given post termination at least a royalty free license to use the documents or technology used and developed by the operator in relation to the systems – and this should extend to successor operators. Is there a necessity for the authority to have greater rights than this? Does it wish to be able to apply the technology etc. to other systems elsewhere? If so, it is likely to have to pay a premium for this – and the operator will resist it.
2. If the operator is not responsible for all intellectual property licenses required to operate and maintain the facilities, what other licenses are required?
3. Does the agreement provide for the operator to indemnify the authority against any claims brought by third parties for infringement of intellectual property rights?
4. What is the operator’s liability in respect of successful third party claims for infringement of intellectual property? Is it limited to the payment of damages or an obligation to procure the necessary intellectual property rights for the benefit of the authority?
5. Does the agreement provide for documents supplied by the authority to remain the property of the authority and to be returned on request?
6. Thought should be given as to confidentiality – should there be a right for authority to publish the contract itself – if so, are there certain provisions which the parties will want to withhold from publication?

# **Dispute resolution**

1. The appropriate forum for dispute resolution will partly depend on the nature of the parties – a local operator will be more likely to be comfortable with local courts than an international operator.
2. If alternative dispute resolution mechanisms are to be considered, these need to be clearly drafted.
3. A mechanism that is often used for disputes of a technical nature is reference to an independent expert – the parties will need to make it clear whether the expert's findings are to be final.
4. If the parties consider arbitration, they will need to determine how many arbitrators are appropriate, the rules for appointment and conduct of the arbitration, the location of the arbitration and, if the parties wish to have international arbitration, whether the host country is a signatory to a convention recognising enforcement of arbitral awards.
5. For a more detailed list of issues re dispute resolution, go to the checklist on Dispute Resolution.

# **Priority of documents**

1. It is important to be clear which documents form the contract other than the conditions of contract – i.e., are there any schedules, bidding documents etc. that form part of the contract. If so, which of the documents should take priority in the event of inconsistency between them?
2. To the extent that there are to be specifications set out in a schedule, care should be taken when drafting to limit the schedule to the technical specifications to avoid inconsistency with the conditions. Often great care is taken to involve lawyers in drafting the conditions and in negotiating them, with the technical specifications by a separate team, often with little or no reference to the conditions, and with statements as to standards of care expected etc. This can lead to confusion and problems in the event that the parties fall into dispute.

# **Performance security**

1. Does the agreement provide for parent company guarantees? (This will depend on the identity of the operator and its parent.)
2. Is the parent company guarantor the ultimate parent company of the operator?
3. Are the parent company guarantees indemnities or do they impose an obligation on the part of the guarantors to take over and perform the agreement should the operator fail to do so? (If the latter, this may be unsatisfactory since it may be necessary to identify the breach of contract and call upon the guarantors to perform.)
4. Do the guarantees provide for wording to the effect that the guarantor shall be under no greater liability than the operator under the agreement?
5. Is the form of the parent company guarantee within the authority's control, i.e., is the form of parent company guarantee annexed to the agreement or is it to be approved by the authority?
6. Does the agreement provide for performance bonds? Are these payable on demand or on proven default?
7. Is the identity of the issuer of the performance bonds to be approved by the authority? Are the terms of the bonds annexed to the agreement or subject to the approval of the authority?
8. Do the terms of the bonds or parent company guarantees include all the usual protective wording which an authority would look for e.g. confirmation that amendments to the underlying agreement do not relieve the surety/guarantor of liability?
9. (If lending is involved) are the guarantees and bonds assignable to lenders and to any third party nominated by the lenders?

# **SCHEDULE 1: OPERATOR’S OBLIGATIONS**

The scope of services to be provided by the operator during the term of the agreement is dependent upon the type of facilities being operated. However, in general the services to be provided are likely to fall within one or more of the following categories:

1. Obligations to operate the facilities, including liaison with any intake suppliers and off-takers.
2. Obligations as to the maintenance and repair of the facilities.
3. Testing of the facilities.
4. Obligations as to staffing and training.
5. Obligations as to reporting and the maintenance of records.

It is also helpful to include within the scope of the operator's services, a catch-all provision to the effect that the operator will perform such other services as may be reasonably necessary to ensure the safe, efficient and economic performance of the facilities.

# **SCHEDULE 2: FUNDAMENTAL REQUIREMENTS WITH WHICH THE OPERATOR MUST COMPLY**

The operator should be obliged to operate and maintain the plant at all times in accordance with:

1. All applicable laws and regulations.
2. All applicable consents and licenses.
3. The "Project Agreements", including any concession agreement and/or the principal offtake agreement.
4. Good Industry Practice or the standard of a Reasonable and Prudent Operator.
5. All safety requirements.
6. All manufacturers' recommendations.
7. The requirements of any insurance policies.
8. So as to :
9. minimise any natural deterioration and normal wear and tear;
10. maximise the operating return of the plant; and
11. minimise forced outages (i.e. breakdowns).

NB. To the extent any of the above requirements are inconsistent, the operator should be obliged to comply with the authority's instructions for addressing such inconsistency at no additional cost.

# **SCHEDULE 3: AUTHORITY'S OBLIGATIONS**

The authority's obligations under O&M agreements are normally limited to some or all of the following matters:

1. Payment obligations;
2. Obligations to obtain certain consents and licenses;
3. Supply of various utilities including fuel, water and other consumables;
4. Obligations to provide the operator with access to the Facilities;
5. Provision of certain information e.g. operating manuals and as-built drawings [see discussion re authority’s data within Authority’s Obligations in this Checklist];
6. If appropriate, obligation on authority to make certain capital investments over the term of the agreement;
7. Obligations as to the payment of tax, particularly in overseas projects.

# **SCHEDULE 4: EVENTS ENTITLING THE AUTHORITY TO TERMINATE THE AGREEMENT**

1. Material default of the operator.
2. Persistent minor breach.
3. Insolvency of the operator.
4. Revenues and/or performance falling below a certain level for a certain period.
5. Prolonged force majeure.
6. Change of control of the operator (this is particularly important if the authority is relying on the operator's interest by way of a shareholding in the authority to provide an additional incentive on the operator to perform).
7. Expenditure provided for under the budget being exceeded by a specified limit.
8. Expenditure provided for under the budget being exceeded for a specified number of years.
9. Expropriation of the project.
10. Operator's performance guarantee falls away.
11. Loss by the operator of its operating license.
12. [Convenience]

# **SCHEDULE 5: CONTROLLING THE REIMBURSABLE ELEMENTS OF AN OPERATOR'S FEE**

The normal approach to this issue is by providing for an agreed budget.
The budget procedure should include the following provisions.

1. **Agreeing the Budget**
2. Obligation of the operator to prepare a budget and obtain the authority's approval of that budget.
3. There should be a procedure for resolving disputes as to the contents of such budget.
4. The authority should possibly be entitled to insist on certain items being excluded from the budget, subject to a consequential exclusion of liability of the operator in the event that any liability arises as a result of that exclusion.
5. **Controlling the Budget**.
6. The agreement may provide for the authority, subject to a de minimis provision, to approve all expenditure on an ongoing basis even if covered within the budget. Alternatively, items of expenditure above a certain level need to be approved. In the event that the budget is exceeded in any one year, without the authority's approval, then the threshold above which the authority's approval is required might be reduced.
7. There should be an obligation to identify discrepancies as they arise and to report on the reasons for those discrepancies.
8. There should be provision for [monthly/quarterly] reviews of the budget.
9. There are usually certain exceptions to the general obligation of the operator to keep to the budget e.g.:
10. action taken by the operator to minimise the effects of or avoid any emergency;
11. expenditure approved in advance by the authority; and/or
12. adjustments approved by the authority;
13. possibly increases up to a certain maximum level in relation to each budget head (i.e. not an overall increase)
14. certain items might be acknowledged as being out of the operator's control.

**C. The consequences of failing to stick to the budget:**
The agreement might provide for the following consequences if the budget in any year is exceeded:

1. exceeding the budget by more than a prescribed level might be treated as a material default entitling the authority to terminate the operator's appointment;
2. exceeding the budget in consecutive years or in two years in any three year period might be treated as a material default entitling the authority to terminate the operator's appointment;
3. obligations on the operator to reimburse the authority for any additional costs; and/or
4. revision of financial limits above which the authority's approval is required.

# **SCHEDULE 6: INCENTIVISING THE OPERATOR**

Very often the key to ensuring successful performance by the operator is to develop a fee structure which aligns the interests of the operator with those of the authority.

**Adjustment of the Operator's Fee**

The principle behind such an incentive mechanism is that if the operator performs well, then he is paid more, but if he performs badly he is paid less. This could be drafted in a number of ways such as:

1. providing for the operator to receive a proportion of the amount by which the actual operating revenues exceed the anticipated operating revenues (calculated by reference to a base case model); or
2. by providing for a more sophisticated adjustment formula which adjusts the fee by reference to some or all of the availability, output and/or efficiency of the plant, facilities, or billing collection performance, etc.;

It should be noted that, there may not be sufficient data on the performance of the constructed facilities at the time of drafting and so the formulae may need to be calculated by reference to the likely performance of the plant as anticipated by the operator and authority. This may result in the setting of performance standards which are either too high or too low and thereby preventing the incentive mechanism operating as intended. One way of avoiding this would be by fixing the performance standards on which the incentive formulae is based by reference to the actual performance test results produced once the facilities have been taken over by the operator and tested. Alternatively, a procedure could be developed for setting the anticipated performance standards for each operating year at the start of that year.