



**REPORT ON THE KEY CONTRACTUAL TERMS OF THE MULTI-UTILITIES DIVERSION
FRAMEWORK AGREEMENT ("MUDFA")**

EDINBURGH TRAM NETWORK

PREPARED FOR CITY OF EDINBURGH COUNCIL

28 MARCH 2006

This report summarises the key contractual terms of the MUDFA which was issued by **tie** to bidders as part of the Invitation to Negotiate documentation for the procurement of a MUDFA Contractor. Included as a schedule to this report is a high level risk allocation matrix, which sets out a summary of the risks as they currently sit within the MUDFA. As negotiations progress with tenderers, the risk allocation and precise contractual terms may alter.

1. Contracting Parties

tie and the MUDFA Contractor.

2. Purpose

To appoint a construction company which will act as a single point of responsibility with regard to the construction works associated with the utilities diversions required for the Edinburgh Tram Network.

3. Contract Duration

The MUDFA Contractor is obliged to carry out MUDFA Works until the issue of the last Certificate of Substantial Completion in respect of the MUDFA Works. The Defects Correction Period runs for a period of 5 years from the date of the last Certificate of Substantial Completion.

4. MUDFA Contractor's General Responsibilities

In addition to obligations relating to Good Industry Practice and the MUDFA Contractor carrying out the MUDFA Works to a reasonable level of professional skill, care and diligence, the MUDFA Contractor will be required to use best endeavours to:

- maximise construction productivity by reference to international best practice;
- minimise disruption to the city of Edinburgh;
- minimise the diversionary works;
- maintain safety; and
- minimise out-turn costs.

The MUDFA Contractor will not be required to carry out any design in relation to any of utility diversion works but the MUDFA Contractor will be required to work with Parsons Brinckerhoff (the systems designer appointed by **tie**) to ensure that due

consideration is given to the following aspects of the MUDFA Works: type of materials; optimum and cost effective construction methods; construction programme, and temporary works.

5. Obligations in respect of the Utilities

tie has been seeking the support of various utility companies and the owners of utility apparatus with regard to the concept of there being a single contractor who will carry out utilities diversions in relation to the Edinburgh Tram Network. To date, **tie** has entered into agreements with the following companies:

- Scottish Water;
- Scotland Gas Networks;
- BT;
- Easynet;
- NTL; and
- Thus.

These agreements deal with the works which the MUDFA Contractor will be permitted to carry out in respect of each Utility's Apparatus, the standard of those works, the associated costs and indemnities. The terms of these agreements as they relate to the MUDFA Contractor have been included within Clause 3 of the MUDFA. Such terms include:

- safeguarding of the Apparatus;
- allowing inspection by the Utilities;
- emergency works; and
- allowance for the execution of the works by the Utility at the same time as the MUDFA Works.

Negotiations are continuing with:

- Scottish Power;
- BAA;
- Forth Ports;
- Telewest; and
- Cable and Wireless.

As the negotiations are completed with the above companies, the MUDFA will be amended accordingly.

6. Performance Bond, Parent Company Guarantee and Collateral Warranties

The MUDFA Contractor will be required to provide an "on demand" performance bond for £5,000,000, a parent company guarantee (where relevant) and collateral warranties.

7. Pre-Construction/Construction Gateway

The MUDFA Contractor will be required to provide the Pre-Construction Services, the Risk Services and the Stakeholder Services from the date of award of the MUDFA. Unless otherwise authorised by **tie**, the MUDFA Contractor will not be permitted to commence the Construction Works and Construction Services until the Pre-Construction Deliverables have been completed. This is anticipated to occur in January 2007.

8. Work Order Process

Following completion of the Pre-Construction Deliverables, the MUDFA Works in respect of each Work Section will be authorised through a Work Order process which comprises:

- **tie** confirming Work Order Requirements;
- the MUDFA Contractor submitting Work Order Proposals; and
- **tie** issuing a Work Order Confirmation Notice.

Included as part of the Work Order Requirements issued by **tie**, will be (as the context requires):

- the scope and description of the works, services and supplies required from the MUDFA Contractor;
- the design and drawings for the required works;
- any additional requirements including any requirements in relation to specification, reinstatement, quality control and testing and commissioning in addition or as an alternative to the requirements set out in Schedule 3 (*Specification*);
- any additional requirements from any third party affected by the proposed works;
- the required Land Consents;
- any additional programme constraints; and
- any additional construction constraints.

The Work Order Proposals prepared by the MUDFA Contractor will include:

- the MUDFA Contractor's risk assessments and method statements which respond to the health and safety and quality plans prepared for the MUDFA Works;
- a Work Section Programme and any other relevant programme information;
- updated costs with regard to the relevant part of the Anticipated Final Account; and
- all necessary information as specified in Schedule 2 (*Technical Requirements*) including any relevant Access Permit Forms.

9. Land Consents

tie shall provide the MUDFA Contractor with all of the Land Consents which are required in order for the MUDFA Contractor to carry out its works. These Land Consents shall include licences to occupy land, wayleaves, temporary traffic regulation orders and any other land-related consents. The MUDFA Contractor will be required to assist **tie** to obtain any of the Land Consents.

10. Temporary Traffic Regulation Orders (TTROs)

tie, CEC and Parsons Brinckerhoff are currently working together to produce a protocol for the development and execution of TTROs in relation to the MUDFA Works and the construction works associated with the Edinburgh Tram Network. This protocol will be released to Tenderers during the Tender period. The MUDFA Contractor shall also be required to take account of this protocol when developing the Traffic Management and Work Site Staging Plan and the TTRO Obligations and Traffic Management Procedures.

11. Value Engineering Incentive

During the Pre-Construction Phase, the MUDFA Contractor will be required to work with the SDS Provider, the Utilities and **tie** to, where possible, reduce the Tender Total and the costs associated with the MUDFA Works by:

- proposing and agreeing design solutions involving value engineering;
- proposing and agreeing methods for maximising construction productivity;
- proposing and agreeing the manner in which any disruption caused during the MUDFA Works to the City of Edinburgh is minimised;
- achieving savings in the preliminary costs, and the setting up costs;
- refinement of the sequence of work shown in the Construction Programme submitted as part of the MUDFA Contractor's tender;
- proposing alternative materials and components which meet the requirements of the Agreement (subject to the approval of **tie**);
- achieving savings in respect of the required Temporary Works; and
- achieving savings associated with risk mitigation.

At the end of this period, a Value Engineering Incentive will be calculated on the basis of 20% of the saving from the original Tender Total. The MUDFA Contractor may apply for a Value Engineering Incentive Payment in certain circumstances, which are set out in the MUDFA.

The MUDFA Contractor shall not be entitled to any Value Engineering Incentive Payment if the MUDFA Contractor has breached any health and safety legislation or breached a material term of the MUDFA. If the MUDFA Contractor fails to achieve substantial completion of each Work Sector by the Longstop Date, **tie** may deduct the liquidated damages from any value engineering payment which is due.

12. Payment

The MUDFA Contractor will be paid as follows:

- application for payment - within 3 Business Days following the final date of each calendar month;
- Interim Certificate issued by **tie** - no later than 10 Business Days after the date on which the application for payment was received;
- valid VAT invoice to be submitted by the MUDFA Contractor within 7 days of the Interim Certificate; and
- Final Date for Payment shall be 30 days from the date of the Interim Certificate.

Retention shall be at a rate of 3%, released at the end of the Defects Correction Period. However, Tenderers have been given the option to provide a £1.5m retention bond.

13. Relief Events

The MUDFA Contractor is entitled to apply for an extension of time in the following events:

- **tie** Change;
- delay due to **tie** failure to issue Works Order in accordance with Programme;
- delay due to **tie's** failure to give possession or access;
- delay due to adverse physical conditions and artificial obstructions;
- delay due to **tie's** Representative's instructions;
- delay due to orders from **tie's** Representative in respect of removal of unsatisfactory work or materials;
- delay due to Utilities Works carried out by Utilities; and
- material breach by **tie**.

The MUDFA Contractor is entitled to additional payments for:

- costs incurred in relation to discovery of unidentified live Utilities Apparatus;
- direct costs of **tie's** Representative's instructions beyond those reasonably foreseen by an experienced contractor;
- costs of rectifying setting-out where error is based on incorrect data provided by **tie's** Representative;
- costs of suspension of work on **tie's** Representative's instruction; and
- costs of surveys, searches, tests or trials instructed by **tie's** Representative where defect, imperfection or fault is not one for which the MUDFA Contractor is liable.

14. Programme

The MUDFA Contractor is required to progress the MUDFA Works in accordance with the Programme which comprises the Pre-Construction Programme and the Construction Programme.

During the Pre-Construction Phase the MUDFA Contractor is required to develop the Pre-Construction and Construction Programme submitted at tender in accordance with Schedule 1 (*Scope of Works and Services*).

Any changes to Programme must be agreed with **tie's** Representative.

15. Liquidated Damages

These are set at a rate of £50,000 per week and will be triggered if the MUDFA Contractor does not substantially complete any of the Work Sectors by 30 June 2008.

16. Third Party Agreements

tie and CEC have entered into a number of agreements with third parties who are potentially affected by the construction of the Edinburgh Tram Network. The agreements which could impact on the MUDFA Works have been reviewed, and the terms which the MUDFA Contractor is required to comply with have been set out in Schedule 13 of the MUDFA. The terms of several of these agreements are still in negotiation and this Schedule 13 will be updated during the tender period.

17. Changes

tie may instruct additions, modifications reductions or omissions in respect of the MUDFA Works as **tie** Changes. **tie** must serve a **tie** Notice of Change on the MUDFA Contractor and the MUDFA Contractor shall then within 10 Business Days provide **tie** with an Estimate. If **tie** agrees with the Estimate it may issue a **tie** Change Order. The MUDFA Contractor shall not commence such work until instructed through receipt of a **tie** Change Order.

If the MUDFA contractor becomes aware of the need or desirability of a variation to the MUDFA Works it shall notify **tie** and if **tie** wishes to proceed with such variation, it shall issue a **tie** Notice of Change and follow the procedure above.

18. Termination

tie may terminate the MUDFA on 7 days notice in the event of:

- Insolvency Event;
- material breach;
- conduct incompatible with the performance of the MUDFA Works and/or wilfully detracts from the image and reputation of **tie**, CEC or the Scottish Ministers;
- breach of confidentiality provisions;
- incompetence of replacement Key Personnel;
- failure to resolve conflict of interest;
- materially prejudicial change in legal status or change in control;

- abandonment;
- failure to commence Pre-Construction Services, Construction Services or Construction Works.
- suspension of MUDFA Works for more than 14 Days;
- failure to remove condemned works or materials within 14 Days; and
- failure to proceed with MUDFA Works with due diligence or for persistent or fundamental breach.

In addition, **tie** may terminate the agreement for any reason during the Pre-Construction Phase on 30 days' notice. **tie** may also terminate the Agreement if the MUDFA Contractor or an employee commits a Prohibited Act.

The MUDFA Contractor may terminate the Agreement on 60 days notice in the event of a **tie** Default which is not rectified in the notice period. **tie** Default Events are:

- failure to pay amounts due and payable in excess of 5% of Tender Total; and
- material breach by tie for 90 days which frustrates or makes impossible performance by the MUDFA Contractor.

Either Party may terminate in the event of Force Majeure continuing for 12 Months.

19. Insurances

The MUDFA Contractor shall, at its own cost, procure that each of the Required Insurances is taken out and maintained provided that they are available in the EU insurance market at commercially reasonable rates and terms. The Required Insurances are:

- Professional Indemnity Insurance (£10m);
- Third Party Liability Insurance (Pre-Construction Phase) (£10m);
- Employers Liability Insurance (£10m);
- MUDFA Contractor's Plant Insurance; and
- Comprehensive Motor Insurance

tie approval is required for any material alteration to the terms of any of the Required Insurances.

The MUDFA Contractor acknowledges that **tie** is taking out Owner Controlled Insurance Programme (OCIP) Insurances and that it shall comply with the terms of the OCIP Insurances.

tie may require the MUDFA Contractor to take out and maintain other Additional Insurance in the names of parties reasonably requested by **tie**.

The obligation to maintain professional indemnity insurance remains for 12 years from the date of the last Certificate of Substantial Completion in respect of the MUDFA Works.

20. Miscellaneous

- controls on sub-contracting
- MUDFA contractor's superintendence
- safety and security
- care of the works
- consents
- quality assurance
- suspension
- qualifying change in law
- intellectual property
- confidentiality
- CDM Regulations.

21. Scope of Works and Services

The scope of the MUDFA Works, which will require to be carried out and completed by the MUDFA Contractor, is set out in Schedule 1 (*Scope of Works and Services*) of the MUDFA. This scope includes Pre-Construction Services, Construction Services, Construction Works, Risk Services, Stakeholder Services and the provision of accommodation and vehicles for the use of **tie**.

Pre-Construction Services

The following services will be required from the MUDFA Contractor:

- Development of Work Breakdown Structure;
- Development of and reporting on Pre-Construction and Construction programmes;
- Interaction with the SDS Provider with regard to the provision of Initial and Final Buildability Reports, Communications Plan, Procedures for dealing with Unidentified Apparatus and Unrecorded Artificial Obstructions, and input to environmental plans;
- Development of Quality, Safety and Environmental Management Systems;
- Assistance in the production of Traffic Management and TTRO proposals;
- Reporting on pricing and cost control;
- Development of access permits and permits to work;
- Development of the Construction Health and Safety Plan;
- Development of Method Statement Procedures;

- Communications, meetings and progress reporting; and
- Advance Construction Works and Enabling Works.

Construction Services

The following services will be required from the MUDFA Contractor:

- Planning and management of the Construction Works;
- Further development of the Pre-Construction Deliverables as required;
- Monthly updates to the Construction Programme;
- Monthly updates to the Anticipated Final Account;
- Communications, meetings and progress reporting;
- Interaction with the SDS Provider, tie, the Utilities and affected third parties to optimise progress and ensure that all issues relevant to the MUDFA Works are addressed timeously;
- Provision of assistance in the production of Traffic Management and TTRO proposals;
- Provision of Construction Advice;
- Liaison and engagement with the Utilities as necessary;
- Input to the Health and Safety file; and
- Implementation of Traffic Management measures.

Construction Works

The scope of the Construction Works is described fully in Part 4 of Schedule 1 (*Scope of Works and Services*) of the MUDFA. See table below for summary of the Construction Works which have been agreed to date with the Utilities:

Area of work	Scotland Gas Networks	Scottish Water	BT	Easynet	Thus	NTL
	Gas	Water and Waste water	Tele-communications			
Civil engineering works including duct and pipe laying	MUDFA	MUDFA	MUDFA	MUDFA	MUDFA	MUDFA
Cable laying	n/a	n/a	BT	MUDFA (using Easynet or other nominated subcontractor)	MUDFA	MUDFA
Cable jointing	n/a	n/a	BT	MUDFA (using Easynet or other nominated subcontractor)	MUDFA	MUDFA
Commissioning and testing	MUDFA	MUDFA	BT	MUDFA (using Easynet or other nominated subcontractor)	MUDFA	MUDFA
Decommissioning	MUDFA	MUDFA	BT	MUDFA (using Easynet or other nominated subcontractor)	MUDFA	MUDFA
Inspection by utility	SGN	SW	BT	Easynet	Thus	NTL

Risk Services

The following services will be required from the MUDFA Contractor:

- Provide input to project risk management plan;
- Provide input to project assumptions register;
- Liaise with SDS Provider, Infracore, **tie**, the **tie** project team, **tie's** technical, legal, financial and other advisors regarding risk matters;
- Contribute to the project risk register;

- Provide monthly risk progress reports; and
- Provide construction hazard report 4 weeks before construction start.

Stakeholder Services Scope

The following services will be required from the MUDFA Contractor:

- Appointment of liaison officer to manage all public relations;
- Provision of information and documentation required for information centres;
- Write, publish and distribute weekly newsletter;
- Publication of call centre details; and
- Development and operation of Contacts Log for complaints, comments and queries.

Accommodation and Vehicles

- Provision and maintenance of accommodation and vehicles as specified in Part 7 of Schedule 1 (Scope of Works and Services) of the MUDFA.

Technical Requirements

The Technical Requirements set out in Schedule 2 (*Technical Requirements*) of the MUDFA specify the constraints, practices and procedures that the MUDFA Contractor shall comply with when developing the plans in the Pre-Construction Phase and during implementation in the Construction Phase.

The Technical Requirements cover:

- Management systems and compliance procedures;
- Instruction and training;
- Safe systems including Access and Permits to Work;
- Hours of work;
- Traffic and pedestrian management, and interfaces with the public;
- Site arrangements;
- Environmental constraints in relation to construction activities;
- Waste management in relation to construction activities; and
- Ecology and archaeology constraints.

These Technical Requirements incorporate the Code of Construction Practice issued by the City of Edinburgh Council.

Specification

The Specification set out in Schedule 3 (*Specification*) of the MUDFA contains the Overarching Specification and the Utilities Specifications. The Overarching

Specification defines the MUDFA Contractor's general obligations regarding the constraints and requirements for existing apparatus, highways and buildings. Reference is also made to the civil engineering requirements as provided for in the New Roads and Street Works Act 1991 and the Specification for the Excavation and Reinstatement of Openings in Highways (HAUC SWP 163).

The Utilities Specifications contain the relevant Utility specific information for the types of installations and diversions. Tenderers are required to understand the Utilities Specifications, the Overarching Specification and the drawings supplied with this ITN to ensure that the requirements are fully understood.

22. Pricing

Tenders have been required to price the following:

- Pre-Construction Services including Overhead & Profit (June to October 2006);
- Overhead & Profit for the Construction Phase;
- Contract Preliminaries;
- Work Sector Preliminaries (refer to Section 4 of this ITN for a definition of Work Sectors);
- Proposed percentage additions to the Prime Cost Sums;
- Proposed percentage additions to the Provisional Sum; and
- Bills of Quantities.

The Bills of Quantities contain approximate quantities. As the design develops, the quantities will be firmed up.

SCHEDULE

MULTI-UTILITIES DIVERSION FRAMEWORK AGREEMENT ("MUDFA")

RISK ALLOCATION MATRIX

Risk : Performance of the Works	Allocation		
	Public Sector	Private Sector	Shared
Failure to provide design in sufficient time or to sufficient standard to allow works to proceed on programme ¹	✓		
Failure on part of MUDFA Contractor to carry out the required works in accordance with Programme (other than in the case of "Relief/Compensation Events")		✓	
Failure to carry out the works in accordance with:			
• detailed design prepared by SDS Provider		✓	
• the Design Manual (in so far as relevant to the MUDFA Works)		✓	
• the required level of skill, care and diligence		✓	
• Utility Specifications/Additional Specifications		✓	
• the MUDFA Contractor's quality management system and plans		✓	
• the Tram Legislation		✓	
• applicable Laws and Consents and Land Consents (including TTROs)		✓	
• the Environmental Statements and other applicable environmental regulations and requirements		✓	
• Good Industry Practice		✓	
• the requirements of statutory parties affected by the MUDFA Works (including SEPA, Coal Authority, Historic Scotland, SNH, BAA, Network Rail and the Scottish Executive Rural Affairs Department)		✓	
• the Technical Requirements (Code of Construction Practice), in so far as relevant to the MUDFA Contractor		✓	
Discovery of unidentified utilities and consequent delay and increased cost	✓		
Failure to update Programme in line with the progress of the works		✓	
Occurrence of a "Relief Event" (see Clause 38)			✓
Occurrence of a "Compensation Event" ²	✓		
Failure to discharge stakeholders' and Utilities' requirements in relation to the works as required under the contract		✓	

¹ This risk has been passed down to the SDS Provider pursuant to (and subject to) the SDS Agreement.

² This relates to discovery of live apparatus, direct costs above those that could be foreseen by an experienced Contractor, costs of rectifying setting out where this is due to incorrect data provided by **tie**, costs of suspension and costs of surveys, searches etc where defect, imperfection etc not one for which the MUDFA Contractor is responsible.

Risk/benefit that works will be completed at a lower cost than the Tender Total			✓
Failure of MUDFA Contractor to procure relevant Parent Company Guarantee, Retention Bond and Performance Bond		✓	
Failure on the part of the MUDFA Contractor to comply with the obligations of Principal Contractor under the CDM Regulations		✓	
Failure to provide tie , Utilities and other nominated persons with access to inspect the works		✓	
Risk of damage to the Utilities Apparatus as a result of MUDFA Works		✓	
Failure on the part of tie to issue a completion certificate for a Work Sector within relevant timescale	✓		
Failure to provide transportation and temporary accommodation for tie		✓	
Risk that the works will be adversely affected by protestor action		✓	

Risk : Land Issues	Allocation		
	Public Sector	Private Sector	Shared
Risk that there are defects in the title that affect the MUDFA Contractor's ability to carry out the works	✓		
Failure to obtain relevant licence to occupy and use land for the works	✓		
Failure to obtain relevant planning consents for works ³	✓		
Failure to obtain temporary traffic regulation orders in order to meet programme ⁴	✓		
Failure to obtain the relevant wayleaves necessary for carrying out the works	✓		
Failure to obtain consents and licenses necessary for the works, other than those specifically mentioned		✓	
Failure to give access to any notified third parties		✓	
Risk that there are unforeseen ground conditions or problems with existing structures etc.		✓	

³ This risk will be passed down to the SDS provider pursuant to (and subject to) the SDS Agreement.

⁴ This risk will be passed down to the SDS Provider pursuant to (and subject to) the SDS Agreement.

Risk : Financial Provisions	Allocation		
	Public Sector	Private Sector	Shared
Failure to submit application for payment within relevant timescales		✓	
Failure to submit valid VAT invoice within relevant timescales		✓	
Failure to make payment to the MUDFA Contactor within the relevant time periods set out in the contract	✓		
Failure to maintain proper books, accounts and records relating to the works		✓	

Risk : tie Changes and Changes in Law	Allocation		
	Public Sector	Private Sector	Shared
Execution of a tie Change results in additional costs and impact on programme	✓		
Failure to deliver Estimate within time period stipulated in contact		✓	
tie does not have legal power or capacity to require implementation of a change	✓		
Change is contrary to law, not technically feasible etc	✓		
Failure to confirm Estimate in writing within time period stipulated in contract	✓		
Failure to mitigate circumstances giving rise to requirement for change		✓	
Failure to notify tie that an instruction amounts to a tie change		✓	
Qualifying Change in Law ⁵			✓
General Change in Law		✓	

Risk : Insurance	Allocation		
	Public Sector	Private Sector	Shared
Failure to maintain MUDFA Contractor's required insurances		✓	
Failure to comply with terms of the OCIP Insurances		✓	
Failure to provide relevant documentation in relation to the Required Insurances		✓	
Risk that required insurance becomes uninsurable			✓

Risk : Termination	Allocation		
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⁵ Note that the MUDFA Contractor is responsible for the first £15,000 of any Qualifying Change in Law.

	Public Sector	Private Sector	Shared
Risk of termination due to:			
• tie's failure to pay any sum greater than 5% of the Tender Total on the due date	✓		
• Unremedied tie Material Breach	✓		
• Material breach of MUDFA Contractor		✓	
• MUDFA Contractor insolvency		✓	
• MUDFA Contractor's breach of assignation provisions		✓	
• Conduct incompatible with performance of MUDFA Works or that wilfully detracts from reputation of tie , CEC or SE		✓	
• Abandonment of works by MUDFA Contractor		✓	
• Incompetence of replacement Key Personnel		✓	
• MUDFA Contractor's failure to resolve conflict of interest		✓	
• Change in control or legal status of MUDFA Contractor		✓	
• MUDFA Contractor's breach of confidentiality		✓	
• Failure to commence works or services without due cause		✓	
• Suspension without due cause		✓	
• Failure to remove condemned works or services		✓	
• Failure to proceed with due diligence or persistent or fundamental breach		✓	
• Force Majeure			✓

Risk : Key Personnel, Staff and Sub-Contracting	Allocation		
	Public Sector	Private Sector	Shared
Failure to have a sufficient number of appropriate qualified staff or employ key personnel in relation to the works		✓	
Failure to follow contractual procedures in respect of sub-contracting or assignation		✓	
Risk that staff misconduct leads to a requirement to remove staff from the site		✓	

Risk : Indemnities	Allocation		
	Public Sector	Private Sector	Shared
Breach by the MUDFA Contractor of term of the Agreement or any law or any negligent or wilful act or omission by the MUDFA contractor, causing loss to tie		✓	
Indirect losses	✓	✓	

Risk : Confidential Information	Allocation		
	Public Sector	Private Sector	Shared
Unauthorised Disclosure of Confidential Information issued to the MUDFA Contractor by tie		✓	
Breach of the terms of FOISA ⁶	✓		

⁶ Note however that there are extensive obligations on the MUDFA Contractor to comply with **tie's** FOISA obligations and to assist **tie** in complying with the same.