



BIDDING DOCUMENTS FOR REPAIR OF VEHICLE MOUNTED JAMMERS



- 1) *Instructions to Bidders on pg # 2*
- 2) *Bid form is attached on pg # 4*
- 3) *Bid Security Form is attached on pg # 5*
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- 5) *Evaluation Criteria is attached on pg # 11*
- 6) *Sample Contract Agreement is attached as Annexure-A*
- 7) *Technical Proposal Form is attached as Annexure-B*
- 8) *Financial Proposal Form is attached as Annexure-C*
- 9) *List of Work detail Annexure -D*

Invitation to Bid

Affix /Paste Advertisement (IFB or EOI)

Instruction to bidder

- i. The bidder is expected to examine the Bidding Documents, including all instructions, forms, terms, specifications and charts/drawings. Failure to furnish all information required by the Bidding documents or submission of a Bid not substantially responsive to the Bidding Documents in every respect would result in the rejection of the Bid.
- ii. The Special Security Unit (SSU), Sindh, request Tender Bids in sealed envelopes as per information required in this document. Proponents applying for bids should submit Financial Proposal and Technical Proposal in two separate envelopes.
- iii. The Technical Proposal should contain all the bid items without quoting the price and must list firm's clientele, details of past project, items specification etc. Financial Bids of firms not obtaining minimum passing criteria on Technical basis will not be opened.
- iv. Interested /Eligible bidders may obtain further information on the bid and inspect the bidding documents at the office of Commandant, (SSU) Hassan Square Near Expo Center, Karachi.
- v. All bids must be accompanied by an earnest money (2%) of total bid amount, and must be delivered to the office of the Commandant (SSU) Karachi up-to 23-01-2017 till 1200 hrs. The Bid shall be opened on the same day i.e. (23-01-2017) at 1230 hrs on the same day in presence of bidders who wish to remain present.
- vi. The Special Security Unit (SSU) Sindh will not be responsible for any costs or expense incurred by bidders in connection with the preparation or delivery bids.
- vii. Bidders shall submit bids, which comply with the bidding documents, for alternate bids, bidder has to purchase separate bidding documents and alternate bid shall be treated as separate bid.
- viii. Procuring Agency reserves the right to accept or reject one or all the tenders in accordance with SPPRA Rules-2010.
- ix. All prices quoted must include any Taxes applicable, i.e. Income Tax, Sales Tax or any other tax imposed by government by law. If not specifically mentioned in the Quotation, then it will be presumed that the prices include all the taxes.
- x. Enquiries regarding this RFP shall be submitted in writing to:
Commandant (SSU),
Hassan Square, Near Expo Center, Karachi
Phone:: (92-21) –99244645, Fax (92-21) –99243865



- xi. Every page of the tender document should be signed and sealed by the bidder.
- xii. The details of this notice are also available on website of Police department (www.sindhpolice.gov.pk) and SPPRA website (www.pprasindh.gov.pk).

-sd-

Commandant
Special Security Unit, (SSU)
Karachi.



BID FORM for _____

To:

Addl:Inspector General of Police,
Karachi.

Sir,

Having examined the bidding documents, the receipt of which is hereby duly acknowledged, for the above Contract, we, the undersigned, offer to supply, deliver and test in conformity with the said bidding documents (Technical and Financial proposals are attached as annexure-B and annexure-C respectively) are submitted herewith separately as per your requirement.

We undertake, if our Bid is accepted, to complete the supply in accordance with the delivery time mention in this tender documents.

If our Bid is accepted, we will provide the performance security in the sum equivalent to 10% percent of the Contract Price i.e.,Rs. for the due performance of the Contract as per bid Security Form.

Dated this _____ day of _____ 201____

WITNESS

BIDDER (Sign + Seal)

Signature: -----

Signature: -----

Name:-----

Name:-----

Title:-----

Title:-----

Address:-----

Address:-----

CNIC #:-----

CNIC #:-----



BID SECURITY FORM

WHEREAS _____ (hereinafter called “**the Bidder**” has submitted its bid dated _____ for the purchase of “

_____, (hereinafter called “**the Bid**”).

KNOW ALL MEN by these presents that We _____ (Name of Bank) of _____ (Name of Country) having our registered office at _____ (address of Bank) hereinafter called “the Bank”) are bound into the Provincial Police Officer, Sindh, Karachi, Pakistan (hereinafter called “the Purchaser”) in the sum of -----, for which payment well and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns, by these presents.

Sealed with the Common Seal of the Bank this _____ day of _____, 201____.

THE CONDITIONS of this obligation are:

1. If the Bidder withdraws its Bid during the period of bid validity specified by the Bidder on the Bid Form; or
2. If the Bidder does not accept the corrections of his Total Bid Price; or
3. If the Bidder, having been notified of the acceptance of its Bid by the Purchaser during the period of bid validity:
 - (a) Fails or refuses to furnish the performance security, in accordance with the Instructions to Bidders; or
 - (b) Fails or refuses to execute the Contract Form, when requested.

We undertake to pay to the Purchaser up to the above amount, according to, and upon receipt of, its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or both or all the three above stated conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to 28 days beyond the period of bid validity, and any demand in respect thereof should reach the Bank not later than such date.

(NAME OF BANK)
By _____
(Title)
Authorized Representative



PERFORMANCE SECURITY FORM (Applicable in case of bank guarantee)

To: Provincial Police Officer, Sindh,
Karachi-Pakistan.

WHEREAS (Name of the Contractor)

Hereinafter called “the Contractor” has undertaken, in pursuance of the bid for the purchase of hardware including “_____”, dated _____ 201__, (hereinafter called “the Contract”).

AND WHEREAS we have agreed to give the Contractor a Guarantee:

THEREFORE WE hereby affirm that we are Guarantor and responsible to you, on behalf of the Contractor, up to a total Sum of Rs.... ..10% of the total contract value (Amount of the guarantee), and we undertake to pay you, upon your first written demand declaring the Contractor to be in default under the Contract, and without cavil or argument, any sum or sums, within the limits of 10% of the total contract value (Amount of Guarantee) as aforesaid without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until ____ day of _____ 201__, or the warranty period.

[NAME OF GUARANTOR]

Signature _____

Name _____

Title _____

Address _____

Seal _____

1. General Terms & Conditions

(i) Bid Bond

A bid bond, and bid security in the shape of a Pay Order / Bank Draft in favor of Commandant (SSU) equivalent to 2% of the total cost of bid should be submitted along with the tender.

(ii) Validity of the proposal

All proposal and price shall remain valid for a period of 90 days from the closing date of the submission of the proposal. However, the responding organization is encouraged to state a longer period of validity for the proposal.

(iii) Currency

All currency in the proposal shall be quoted in Pakistan Rupees (PKR).

(iv) Withholding Tax, Sales Tax and other Taxes

The responding organization is hereby informed that the Government shall deducted tax at the rate prescribed under the tax laws of Pakistan, from all payments for services rendered by any responding organization who signs a contract with the Police department. The responding organization will be responsible for all taxes on transaction and/or income, which may be levied by government. If responding organization is exempted from any specific taxes, then it will provide the relevant documents with the proposal.

(v) Stamp Duty

Stamp duty for contract documents shall be borne by responding organization/bidder at the time of signing of contract.

(vi) OEM relationships & Warranties

- Hardware Arms & Ammunition/Equipment should have warranty, including parts and labour and license (if any).
- All Management Software provided should have warranties for one year against defects/bugs as well as updates.
- The responding organization (RO) to be authorized Partner / reseller, of **THE ORIGINAL MANUFACTURER.**

(vii) Supply Capabilities

Responsive Organization should clearly indicate the duration of delivery of quoted item(s) specified in Annexure-D

Sr. No.	Item	Action Item	Response time (in hours)
1		Replacement	
		Repair	
		Re-configuration	
		Backup Replacement	

(viii) Compliance to Specification

The Responding Organization (RO) to provide information as per (Annexure-D). RO may not propose any kind of refurbished item in their technical proposals.

(ix) Financial Capabilities

The RO(s) shall describe the financial position of its organization. Income Statement or Annual Report should be included in the detailed Technical proposal.

(x) Liquidated damages.

- It is utmost importance that schedule to tender should be filled in very carefully and the instructions set forth above, scrupulously complied with failing which the offer will be ignored. In case of non-completion of supply within stipulate period Security deposit will be forfeited in favor of the Special Security Unit (SSU) Sindh, Karachi as stated at sub clause (d).
- An affidavit that the firm declares details of litigation with any client during the last 5 years be provided.
- An affidavit that the firm has never been blacklisted by any Government Department.
- Liquidated damages of 0.25% per day of the contract price will be deducted for delayed supply/delivery of item/equipments then purchaser reserve the right to cancel the contract, forfeit the performance security and black list the firm.

(xi) Delivery Time

- **90 days** after issuance of purchase order.
- **Mode of payment:** 100% after supply and successful testing on the laboratory.
- Release of performance guarantee after completion of warranty period (if applicable).

Execution / Delivery will be at Special Security Unit (SSU) Sindh, Karachi.

- xii.** The earnest money is refundable after finalization of the bid, in case of return of financial bids unopened to non-responsive bidders, on request after opening of Financial bids or when award / placement of purchase order is finalized. The bidders will, however, have to apply for refund through a written request on their company/firm letter head addressed to Commandant (SSU).
- xiii.** The successful bidder will have to deposit 10% security of the amount of contract, in the form of pay order, bank guarantee or any other financial instrument recognized by Government of Pakistan, to the satisfaction of Commandant (SSU). The same will be returned on due completion of the contract and warranty period.
- xiv.** To conform, the approved specifications, the evaluation criteria of bids will be based on the technical expert opinion, observation of evaluation committee and terms and condition set forth in the bidding documents, tender notice and Bid Form or as deemed appropriate by the Purchase Committee.
- xv.** Date of opening of the Financial Proposals will be announced separately. The proposal of only those bidders will be considered/ opened which are declared qualified after evaluation of technical bids and upon fulfilling all the condition by the Purchase Committee. Further enquiry can be made from Commandant (SSU) telephone No. 021-99244645
- xvi.** Conditional tenders/bids will not be acceptable.
- xvii.** Authority Letter from Principal Company for product and vender authentication shall be provided with the bid.
- xviii.** Special Security Unit (SSU), Sindh Police reserves the right to increase or decrease the scope of work/number of items without assigning any reason.

2. Mode of Delivery and Address

Technical & Financial proposals (2 copies each) should be submitted by **1200** hours at the address given below:

Office of Commandant (SSU),
Hassan Square, Near Expo Center, Karachi
Phone: (92-21) –99244645, Fax (92-21) –99243865

- (i) The technical proposals will be opened on **23.01.2017** at **1200** hours at the same address. The responding organization shall deliver 2 (two) copies of



the technical & financial proposal each copy being physically separated, bound, sealed and labeled as “TECHNICAL PROPOSAL” and “FINANCIAL PROPOSAL” (one Original and one copy), labeled as such on their respective envelopes. The bid security of 2% of the offer in shape of Bank guarantee or Pay Order shall be enclosed in the envelope marked “FINANCIAL PROPOSAL” without the financial proposal shall not be considered and bid shall be rejected.

- (ii) Proposals shall be dropped in the sealed tender box kept in the office of **Commandant (SSU)**, upto **1200** hours. Samples / Brochures should however be delivered by hand or courier so as to reach the address given above by the last date indicated for submission. **PROPOSALS RECEIVED BY FAX OR EMAIL SHALL NOT BE ACCEPTED.**

(iii) **Submission of Proposal**

The complete proposals should be submitted by **1200** hours on 23.01.2017 at the address given in 2(ii) above.

The format of submission of proposal is attached as Annexure-A and Annexure-B. Please provide original brochures and samples of all the items proposed.

CNIC copies of Owner/Authorized person along with witness should be enclosed.

(Please provide photocopies of relevant documents).

(iv) **Opening of Proposals**

The proposals submitted against this RFP will be opened on date mentioned above at **1200** hours in front of the **Purchase Committee** of Sindh Police.



3. Evaluation and Comparison of Technical and Financial Bids

The evaluation will be performed assuming the Contract will be awarded to the bid confirming to Eligibility Criteria and most closely conforming to evaluation criteria and other conditions specified in the bidding documents and having lowest evaluated cost.

a. Eligibility Criteria

- Valid registration with income tax.
- Valid registration with Sales tax.
- Company history years in business?
- Undertaking on stamp paper that firm is not involved in any litigation, Department rift, abandoned or unnecessary delay in completion of any work in the government department.
- Affidavit or undertaking or stamp paper that the firm has not been blacklisted previously by any executing agency.

(Note: All documents are mediatory and must be provided otherwise the bid will not be considered)

Evaluation Criteria and Comparison of Bid

The proposals shall be evaluated on the basis of following parameters.

S.No	Evaluation parameters	Marks	Brief Questionnaire	
1.	Specification	300	Compliance with required specification mentioned at annexure “D”. Attach Brochures/Samples of Quoted items	
2.	Financial Capabilities’	200	<ul style="list-style-type: none">Bank statement of last 3 Years	
			Minimum three years	Marks 75
			More than three year	Marks 100
			Less than three year	Each year obtain 25- Marks
			<ul style="list-style-type: none">Annual turnover of last 3 years	
			Minimum Five Million	Marks 75
			More than Five Million	Marks 100
Less than Five Million	Each year obtain 15- Marks			
3.	Relevant Experience	200	<ul style="list-style-type: none">Bidder should provide work order relating to work / supply mentioned in the Tender Notice	
			Minimum three work order	Marks 150
			More than three work order	Marks 200
			Less than three work order	Each year obtain 50- Marks
Total Marks		700		

N.B

Minimum passing / qualifying marks is 80% i.e. 560 marks out of 700 marks. The bid did not obtaining minimum qualifying score shall not be consider and rejected. Out of the bid qualifying the evaluation criteria, the bid with lowest cost shall awarded contact provided it meets all other procedural requirements.

Information Required

A General

- 1 Name of Bidder
- 2 No of Years in business in Pakistan
- 3 No of Offices locations in Pakistan
- 4 Annual Turnover (Million Rs.)
- 5 Value of projects in hand (details may be given)
- 6 Year of Incorporation
- 7 Status of the Bidder
 - Sole Proprietor
 - Partnership Firm
 - Private Limited Company
 - Public Limited Company
 - Entity registered / incorporated outside Pakistan (Give details)
 - Other (Please specify)
- 8 Names of Owner / Partners / Chief Executive / Directors
- 9 Details of Registered Head Office (Address, Phone, Facsimile, Email and Website information)

4. Contacting the Purchaser

Any effort by a bidder to influence the Purchaser in the Purchaser's decisions in respect of bid evaluation, or Contract award will result in the rejection of the bidder's bid.

5. Purchaser's Right to Accept the Bid or Reject the Bid

The Purchaser reserves the right to accept or reject the bid in according with PPRA Rules-2004, and to annul the bidding process at any time prior to award of Contract, without thereby incurring any liability to the bidder or any obligation to inform the bidder of the grounds for the Purchase's action.

Definitions

In this Contract, the following terms shall be interpreted as indicated:

- **“Purchaser”** means the Special Security Unit (SSU), Police Department, Government of the Sindh, Karachi – Pakistan
- **“Contractor”** means the individual or firm whose bid has been accepted by the Purchaser and the legal successors, in title to the Contractor.
- **“Contract”** means the agreement entered into between the Purchase and the Contractor, as recorded in the Contract Form signed by the parties, including all Schedules and Attachments thereto and all documents incorporated by reference therein.
- **“Commencement Date of the Contract”** means the date of signing of the Contract between the Purchaser and the Contractor.
- **“Contractor Price”** means the price payable to the Contractor under the Contract for the full and proper performance of its contractual obligations.
- **“Contractor Value”** means that portion of the Contract Price adjusted to give effect to such additions or deductions as are provided for in the Contract, which is properly apportionable to the Software or Services in question.
- **“Services”** means services, such as testing and other such obligations of the Contractor covered under the Contract.
- **“Works”** means all items to be provided and work to be done by the Contractor under the Contract.
- **“RO”** means Responding Organization/ Bidder Firm.
- **“RFP”** means Request for Proposal.

Sample Contract Agreement

1. This contract agreement is made and entered into on _____, 201____, BY AND BETWEEN.

i) **Additional Inspector General of Police Karachi, New CCPO Complex, Off Shahra-e-Faisal, Karachi.** hereinafter referred as Purchaser, which expression shall unless repugnant to the context or meaning thereof, be deemed to include its successors and permitted assigns officers delegated to perform functions procurements for and on behalf of various units of Sindh Police department of ONE PART.

AND

ii) **M/s**_____ having its registered office at hereinafter referred as supplier, which expression shall, unless repugnant to the context of meaning thereof, be deemed to include its successors and permitted assigns of the OTHER PART.

2. WHEREAS the Additional Inspector General of Police Karachi, is entrusted with responsibility of procurement of item / articles during current financial year 2016-17 as per description, with specification and quantity, given below:-

S.NO.	DESCRIPTION OF ARTICLES WITH SPECIFICATION	QUANTITY/ NUMBER	Delivery
---	---	---	
---	---	---	
---	---	---	

3. AND WHEREAS, the **Additional Inspector General of Police Karachi**, in accordance with The Public Procurement Rules,2010 as adopted by Government of Sindh vide notification No.**SORI(SGA&CD) 2-30/2010, dated 8th March 2010**



Annexure-A-2/4

4. That **M/s.** _____ participated in the response of open tenders, floated by Addl: IGP Karachi, by submitting technical and financial bids, after necessary evaluation of the item / articles described above; the Departmental Committee opened the financial bids in front of all bidders on _____.
5. That _____ the _____ rates _____ offered _____ by **M/s.** _____ for the item / articles as shown and given above, were found to be lowest offered in comparative terms with the rates of other bidders participating in the process. Therefore, on the recommendation of Departmental Committee, the IGP Sindh has accorded approval to place purchase/procurement order with **M/s.** _____ on terms and conditions specified below:-

NOW THEREFORE PARTIES HEREBY AGREE AS FOLLOWS

- i) That **M/s.** _____ shall supply products/items, articles described and specified alongwith quantity the above within _____ **days** from the date of signing of this agreement.
- ii) That all deliveries shall be made at the office of Commandant (SSU), Hassan Square, Near Expo Center, Karachi, between 0900 hours to 1600 hours on working days only.
- iii) That every article shall be made and finished in all respects to entire satisfaction of Departmental Inspection Committee which shall be at liberty to reject any item/article or part thereof if it is not in accordance with approved sample and specification mentioned in the tender documents submitted by supplier at the time of bidding, and evaluated and approved for this purchase order and such rejection shall be final. The no appeal or review will be permissible against the decision of inspection committee.
- iv) That the **Commandant Special Security Unit (SSU)**, shall give written receipt signed by him giving out complete details, exhibiting the number of items/articles delivered and the number items/articles accepted and rejected, and such receipts shall be conclusive evidence of the acceptance and rejection of the number of articles specified as accepted and rejected.
- v) That all articles rejected shall be taken back and removed by the **M/s.** _____ and nothing shall become due or recoverable by the **M/s.** _____ in respect on account of items/articles so rejected.

- vi) That all articles accepted shall be paid for the **Commandant (SSU)** at the rate of specified below (F.O.R Destination) within financial year _____.

ITEM / ARTICLE	RATE PER UNIT

- vii) In case **M/s.**_____ makes default, in the due performance of this agreement/contract in part or full, **Commandant (SSU)** shall be at liberty to impose and recover L.D. Charges not exceeding 0.25% per month thereof. The penalty shall be applicable only to the extent of items/articles supplied late.
- viii) The **Commandant (SSU)**, shall have right to assess, demand and recover any damages suffered by Police Department due to late supply of the items/articles from the supplier.
- ix) The **Commandant (SSU)** shall be at liberty to deduct and retain the amount so assessed from the bill that may be or may become due and payable at or after the time of such failure to the **M/s.**_____by the said **Commandant (SSU)** whether by virtue of agreement or otherwise.
- x) The Addl: IGP Karachi shall not be responsible for non-performance of this agreement due to change in law, rules and policy of the government as notified in official gazette from time to time.
- xi) That all conditions laid down in the rules framed for procurement by the Government shall apply to transactions made under this contract agreement and both parties shall be bound by it.
6. This contract agreement shall be construed, and the legal relations created herein will be determined in accordance with the laws of Islamic Republic of Pakistan.
7. Any notice required under this contract agreement shall be in writing and shall be effective when received by the addressee at its given address.



8. If any term, conditions, or provision in this Agreement is found to be invalid, unlawful or unenforceable to any extent, the parties shall endeavor in good faith to agree to such amendments that will preserve, as far as possible, the intentions expressed in the Agreement. If the parties fail to agree on such amendments, such invalid terms, condition or provision will be served from remaining terms, conditions and provisions, which will continue to be valid and enforceable to the fullest extent permitted by law.
9. This agreement may be amended only in writing signed by both the parties.
10. IN WITNESS WHEREOF, the parties have executed this agreement on the date set forth above.

Commandant /Special Security Unit (SSU)
On behalf of Addl: IGP, Karachi.

Witness:

1) _____

2) _____



Technical Proposal Form

Bidder's Profile				
Name				
Official Address				
Telephone(s) No.				
Official Fax No.				
GST Registration No.				
Income Tax Reg. No.				
Sr. No.	Specifications	Make & Model	Country of Origin	Supply During (in Days)
1				

Note: Please read carefully the whole document and provide all necessary details with proof of evidence.

BIDDER (Sign + Seal)

**Financial Proposal Form**

Bidder's Profile				
Name				
Official Address				
Telephone(s) No.				
Official Fax No.				
GST Registration No.				
Income Tax Reg. No.				
No. of years in business				
Sr. No.	Equipment(s)Name	Quantity	Unit Cost (Rs)	Total Cost (Rs)
Total Cost in Pak Rupees				
(in words. _____)				

Note: Earnest money will be equivalent to 2% of the total bid cost.

Only Pay Order/Bank Draft for earnest money will be acceptable in favour of Commandant (SSU), Hassan Square, Near Expo Center Karachi.

BIDDER (Sign + Seal)



SPECIFICATIONS

REPAIR OF VEHICLE

MOUNTED JAMMERS



Special Security Unit (SSU)		
Jammer Report		
Vehicle Number	SPA 885	
Model Number	Land Cruiser (VX) 2006	
Existing Specification		
Range	Approx 50 Meter	
Frequency	Band 1 = 20 Mhz - 500 Mhz	
	Band 2 = 315 Mhz - 500 Mhz	
	Band 3 = 800 Mhz - 900 Mhz	
	Band 4 = 1800 Mhz - 1900 Mhz	
Repair Details (approx 100 meter range)		
Components	Quantity	Price
Power Amp Unit (900mh/100w)	1	
Power Amp Unit (1800mh/100w)	1	
VCO Card (4 Band)	1	
VCO 550mh	1	
Power Amp Unit (VHF/UHF)	2	
Noice Generator	1	
BNC Connector	5	
DC to DC Supply	1	
Dry Battery 12v/200amp	2	
GSM Connector	2	
Fan 24v	4	
Upgradation Details (approx 100 meter range)		
Components	Quantity	Price
Power Amp Unit (3G)	1	
3G Antenna	1	
3G VCO with Card	1	
3G Casing	1	
3G Heat Sink	1	
Power Amp Unit (4G)	2	
4G Antenna	1	
4G VCO with Card	1	
4G Casing	1	
4G Heat Sink	1	



Special Security Unit (SSU)		
Jammer Report		
Vehicle Number	SPA 873	
Model Number	Land Cruiser (VX) 2006	
Existing Specification		
Range	Approx 50 Meter	
Frequency	Band 1 = 20 Mhz - 500 Mhz	
	Band 2 = 315 Mhz - 500 Mhz	
	Band 3 = 800 Mhz - 900 Mhz	
	Band 4 = 1800 Mhz - 1900 Mhz	
Repair Details (approx 100 meter range)		
Components	Quantity	Price
Directional Antenna	2	
Power Amp Unit (VHF/UHF)	2	
Power Amp Unit (1800mh/100w)	1	
Power Amp Unit (900mh/100w)	1	
Barrage UHF/VHF	1	
GSM Connector	2	
BNC Connector	5	
Fan 24v	4	
DC to DC supply	1	
Upgradation Details (approx 100 meter range)		
Components	Quantity	Price
Power Amp Unit 3G	1	
3G Antenna	1	
3G VCO with card	1	
3G Caseing	1	
3G Heatsink	1	
Power Amp Unit 4G	2	
4G Antenna	1	
4G VCO with Card	1	
4G Caseing	1	
4G Heatsink	1	



Special Security Unit (SSU)		
Jammer Report		
Vehicle Number	SPA 731	
Model Number	Toyota Fortuner	
Existing Specification		
Range	Approx 50 Meter	
Frequency	Band 1 = 20 Mhz - 500 Mhz	
	Band 2 = 315 Mhz - 500 Mhz	
	Band 3 = 800 Mhz - 900 Mhz	
	Band 4 = 1800 Mhz - 1900 Mhz	
	Band 5 = 2100 Mhz - 2200 Mhz	
Repair Details (approx 100 meter range)		
Components	Quantity	Price
Power Amp Unit (1800mh/100w)	1	
VCO 1800mh	1	
GSM Connector	2	
DC to DC supply	1	
BNC Connector	5	
Fan 24v	4	
Dry Battery 12v/200am	2	
Noise Generator	1	
Upgradation Details (approx 100 meter range)		
Components	Quantity	Price
Power Amp Unit 4G	1	
4G Antenna	1	
4G VCO with Card	1	
4G Caseing	1	
4G Heatsink	1	



Special Security Unit (SSU)		
Jammer Report		
Vehicle Number	SPA 872	
Model Number	Land Cruiser 2006	
Existing Specification		
Range	Approx 50 Meter	
Frequency	Band 1 = 20 Mhz - 500 Mhz	
	Band 2 = 315 Mhz - 500 Mhz	
	Band 3 = 800 Mhz - 900 Mhz	
	Band 4 = 1800 Mhz - 1900 Mhz	
Repair Details (approx 100 meter range)		
Components	Quantity	Price
Power Amp Unit (900mh/100w)	1	
Power Amp Unit (1800mh/100w)	1	
VCO Card (4 Band)	1	
VCO 550mh	1	
Power Amp Unit (VHF/UHF)	2	
Noice Generator	1	
BNC Connector	5	
DC to DC Supply	1	
Dry Battery 12v/200amp	2	
GSM Connector	2	
Fan 24v	4	
Upgradation Details (approx 100 meter range)		
Components	Quantity	Price
Power Amp Unit (3G)	1	
3G Antenna	1	
3G VCO with Card	1	
3G Casing	1	
3G Heat Sink	1	
Power Amp Unit (4G)	2	
4G Antenna	1	
4G VCO with Card	1	
4G Casing	1	
4G Heat Sink	1	



Special Security Unit (SSU)		
Jammer Report		
Vehicle Number	SPA 735	
Model Number	Toyota Fortuner	
Existing Specification		
Range	Approx 50 Meter	
Frequency	Band 1 = 20 Mhz - 500 Mhz	
	Band 2 = 315 Mhz - 500 Mhz	
	Band 3 = 800 Mhz - 900 Mhz	
	Band 4 = 1800 Mhz - 1900 Mhz	
	Band 5 = 2100 Mhz - 2200 Mhz	
Repair Details (approx 100 meter range)		
Components	Quantity	Price
Power Amp Unit (1800mh/100w)	1	
VCO 1800mh	1	
GSM Connector	2	
DC to DC supply	1	
BNC Connector	5	
Fan 24v	4	
Dry Battery 12v/200am	2	
Noise Generator	1	
Upgradation Details (approx 100 meter range)		
Components	Quantity	Price
Power Amp Unit 4G	1	
4G Antenna	1	
4G VCO with Card	1	
4G Caseing	1	
4G Heatsink	1	



Special Security Unit (SSU)		
Jammer Report		
Vehicle Number	SPD 732	
Model Number	Toyota Fortuner (2014)	
Existing Specification		
Range	Approx 50 Meter	
Frequency	Band 1 = 20 Mhz - 500 Mhz	
	Band 2 = 315 Mhz - 500 Mhz	
	Band 3 = 800 Mhz - 900 Mhz	
	Band 4 = 1800 Mhz - 1900 Mhz	
Repair Details (approx 100 meter range)		
Components	Quantity	Price
Directional Antenna	2	
Power Amp Unit (VHF/UHF)	2	
Power Amp Unit (1800mh/100w)	1	
Power Amp Unit (900mh/100w)	1	
Barrage UHF/VHF	1	
GSM Connector	2	
BNC Connector	5	
Fan 24v	4	
DC to DC supply	1	
Upgradation Details (approx 100 meter range)		
Components	Quantity	Price
Power Amp Unit 3G	1	
3G Antenna	1	
3G VCO with card	1	
3G Caseing	1	
3G Heatsink	1	
Power Amp Unit 4G	2	
4G Antenna	1	
4G VCO with Card	1	
4G Caseing	1	
4G Heatsink	1	



Special Security Unit (SSU)			
Jammer Report			
Vehicle Number		SPD 715	
Model Number		Toyota Vigo Champ (2014)	
Existing Specification			
Range		Approx 50 Meter	
Frequency		Band 1 = 20 Mhz - 500 Mhz	
		Band 2 = 315 Mhz - 500 Mhz	
		Band 3 = 800 Mhz - 900 Mhz	
		Band 4 = 1800 Mhz - 1900 Mhz	
		Band 5 = 2100 Mhz - 2200 Mhz	
Repair Details (approx 100 meter range)			
Components		Quantity	Price
Power Amp Unit (1800mh/100w)		1	
VCO 1800mh		1	
GSM Connector		2	
DC to DC supply		1	
BNC Connector		5	
Fan 24v		4	
Dry Battery 12v/200am		2	
Noise Generator		1	
Upgradation Details (approx 100 meter range)			
Components		Quantity	Price
Power Amp Unit 4G		1	
4G Antenna		1	
4G VCO with Card		1	
4G Caseing		1	
4G Heatsink		1	



Special Security Unit (SSU)			
Jammer Report			
Vehicle Number		SPD 729	
Model Number		Toyota Fortuner	
Existing Specification			
Range		Approx 50 Meter	
Frequency		Band 1 = 20 Mhz - 500 Mhz	
		Band 2 = 315 Mhz - 500 Mhz	
		Band 3 = 800 Mhz - 900 Mhz	
		Band 4 = 1800 Mhz - 1900 Mhz	
		Band 5 = 2100 Mhz - 2200 Mhz	
Repair Details (approx 100 meter range)			
Components		Quantity	Price
Power Amp Unit (1800mh/100w)		1	
VCO 1800mh		1	
GSM Connector		2	
DC to DC supply		1	
BNC Connector		5	
Fan 24v		4	
Dry Battery 12v/200am		2	
Noise Generator		1	
Upgradation Details (approx 100 meter range)			
Components		Quantity	Price
Power Amp Unit 4G		1	
4G Antenna		1	
4G VCO with Card		1	
4G Caseing		1	
4G Heatsink		1	



Special Security Unit (SSU)		
Jammer Report		
Vehicle Number	SPD 726	
Model Number	Toyota Fortuner	
Existing Specification		
Range	Approx 50 Meter	
Frequency	Band 1 = 20 Mhz - 500 Mhz	
	Band 2 = 315 Mhz - 500 Mhz	
	Band 3 = 800 Mhz - 900 Mhz	
	Band 4 = 1800 Mhz - 1900 Mhz	
	Band 5 = 2100 Mhz - 2200 Mhz	
Repair Details (approx 100 meter range)		
Components	Quantity	Price
Power Amp Unit (1800mh/100w)	1	
VCO 1800mh	1	
GSM Connector	2	
DC to DC supply	1	
BNC Connector	5	
Fan 24v	4	
Dry Battery 12v/200am	2	
Noise Generator	1	
Upgradation Details (approx 100 meter range)		
Components	Quantity	Price
Power Amp Unit 4G	1	
4G Antenna	1	
4G VCO with Card	1	
4G Caseing	1	
4G Heatsink	1	



Special Security Unit (SSU)

Jammer Report

Vehicle Number	SPA 879
Model Number	Toyota Fortuner

Existing Specification

Range	Approx 50 Meter
Frequency	Band 1 = 20 Mhz - 500 Mhz
	Band 2 = 315 Mhz - 500 Mhz
	Band 3 = 800 Mhz - 900 Mhz
	Band 4 = 1800 Mhz - 1900 Mhz
	Band 5 = 2100 Mhz - 2200 Mhz

Repair Details (approx 100 meter range)

Components	Quantity	Price
Power Amp Unit (1800mh/100w)	1	
VCO 1800mh	1	
GSM Connector	2	
DC to DC supply	1	
BNC Connector	5	
Fan 24v	4	
Dry Battery 12v/200am	2	
Noise Generator	1	

Upgradation Details (approx 100 meter range)

Components	Quantity	Price
Power Amp Unit 4G	1	
4G Antenna	1	
4G VCO with Card	1	
4G Caseing	1	
4G Heatsink	1	



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**Summary Upgradation & Repair of Vehicle Mounted
Jammers of Special Security Unit, (SSU)**

S. No.	Vehicle Number	Model Number	Total Rate
1	SPA 885	Land Cruiser (VX) 2006	
2	SPA 873	Land Cruiser (VX) 2006	
3	SPA 731	Toyota Fortuner	
4	SPA 872	Land Cruiser 2006	
5	SPA 735	Toyota Fortuner	
6	SPD 732	Toyota Fortuner (2014)	
7	SPD 715	Toyota Vigo Champ (2014)	
8	SPD 729	Toyota Fortuner	
9	SPD 726	Toyota Fortuner	
10	SPA 879	Toyota Fortuner	
	Grand Total		