

**POLICE DEPARTMENT
GOVERNMENT OF SINDH**



Bid Document

2013-14

www.sindhpolice.gov.pk

M/s _____

2013-2014





- 1) *Instructions to Bidders on pg # 2*
- 2) *Bid form is attached on pg # 4*
- 3) *Bid Security Form is attached on pg # 5*
- 4) *Performance Security Form is attached on pg # 6*
- 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) *Technical Specification is attached as 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 Biding 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 Police department, Government of 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 AIGP/Logistics, 2nd Floor, CPO Building, I.I.Chundrigar Road, Karachi.
- v. All bids must be accompanied by a earnest money (2%) of total bid amount, and must be delivered to the office of the AIGP/Logistics, on or before **1400** hours on **09.06.2014**. The bids will be publicly opened in the Committee Room of CPO ground floor at **1430** hours on the same day in presence of bidders who wish to remain present.
- vi. The Police department, Government of the 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. As authority competent to accept the tender, the Purchase 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. Enquires regarding this RFP shall be submitted in writing to:
AIGP/Logistics,
Central Police Office, Sindh
2nd Floor, CPO Building, I.I. Chundrigar Road, Karachi
Phone: (92-21) – 99212631, Fax (92-21) – 99213839.
- 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 Government of Sindh (www.sindh.gov.pk).

AIGP/Logistics
For Inspector General of Police /
Sindh Karachi.



BID FORM for _____

To:
Inspector General of Police,
Sindh 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 equal 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 #:-----

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 Inspector General of Police, 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

To: Inspector General of Police , 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 _____

Titel _____

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 AIGP/Logistics 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 30th June 2014 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 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 I the detailed Technical proposal.

(x) Liquidated damages.

- a) It is utmost importance that schedule to tender should be filled in very carefully an 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 Police Department, Government of Sindh, Karachi as stated at sub clause (d).
- b) An affidavit that the firm declares details of litigation with any client during the last 5 years be provided.
- c) An affidavit that the firm has never been blacklisted by any Government Department.
- d) Liquidated damages of 0.025% per day up to 10% of the contract price will be deducted for delayed supply/delivery of equipments then purchaser reserve the right to cancel the contract, forfeit the performance security and black list the firm.



(xi) **Delivery Time**

- _____ months/weeks after issuance of purchase order.
- **Mode of payment:** 100% after supply of item(s)/equipment(s) and successful testing on site.
- Release of performance guarantee after completion of warranty period.

Execution / Delivery of all the items of the Bid will be at Central Police Office Sindh, CPO Building, I.I. Chundrigar Road, Karachi.

- xii. The earnest money is refundable after finalization of the bid, in case of return of financial bids un opened 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 AIGP/Logistics.
- 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 AIGP/Logistics and AIGP/Finance. 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 base 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 AIGP/Logistics, CPO, on telephone No.99212611-25, 99212057, Ext: 297 and 254.
- 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. Police department 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 1400 hours at the address given below:

Office of AIGP/Logistics, CPO
2nd Floor, CPO Building, I.I. Chundrigar Road, Karachi
Tel # 99212631, Fax # 99213839



- (i) The technical proposals will be opened on the same day at 1500 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 "TEHNCIAL 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 AIGP/Logistics upto 14:30 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 14:00 hours on _____ 2014 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 14:30 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 most closely conforming to evaluation criteria and other conditions specified in the bidding documents and having lowest evaluated cost.



Evaluation Criteria and Comparison of Bid

The Technical and Financial Bids shall be evaluated on the basis of following parameters.

S.#	Evaluation Parameter	Marks	Brief Questionnaire
1	Technical Proposal	700	
1A	Hard Specifications	300	Compliance with required specifications mentioned at annexure D.
1B	Support Capabilities	100	Undertaking to provide maximum period of comprehensive warranty. Provided list of Support team and list of Service Centers.
1C	Financial Capabilities	200	<ul style="list-style-type: none">• Annual Turn Over / Auditable Accounts of the firm.• Company History years in business?• Affidavit/Undertaking that the firm is never been black listed and if firm is defaulter in any manner may submit the reason.
1D	Relevant Experience	100	Minimum three work orders for the above work. (Note: Government organizations will be preferred).

N.B.

Minimum passing/qualifying marks is 60% i.e. 420 marks out of 700 marks. The bid not obtaining minimum qualifying score shall not be considered for financial evaluation and their financial proposals shall be returned unopened. Out of the bids qualifying the technical criteria, the bid with lowest evaluated cost shall be awarded contract provided it meets all other procedural requirements.

The Bidder should provide the following required information and placing this Form on top of the Technical Proposal. Relevant portions of the Technical Proposal should be referenced in this form.



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 Sindh 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) **Inspector General of Police, Sindh Central Police Office, I.I. Chundrigar Road, 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) _____
_____ 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 Inspector General of Police, Sindh is entrusted with responsibility of procurement of item / articles during current financial year 2013-2014 as per description, with specification and quantity, given below:-

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

3. AND WHEREAS, the **Inspector General of Police, Sindh**, in accordance with The Public Procurement Rules, 2010 as adopted by Government of Sindh vide notification No. _____ **dated:** _____.



4. That M/s. _____ participated in the response of open tenders, floated by IGP Sindh, 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 _____, Sindh, Karachi between 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 **AIGP/Logistics, CPO, Sindh**, 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 **AIGP/Logistic, CPO, Sindh** at the rate of specified below (C&F Destination) within financial year _____.

ITEM / ARTICLE	RATE PER UNIT

- vii) In case M/s. _____ make default, in the due performance of this agreement/contract in part or full, **AIGP/Logistic, CPO, Sindh** shall be at liberty to impose and recover L.D. Charges not exceeding 0.0.25% per month thereof.. The penalty shall be applicable only to the extent of items/articles supplied late.
- viii) The **AIGP/Logistic, CPO, Sindh** 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 **AIGP/Logistic, CPO, Sindh** 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 **AIGP/Logistic, CPO, Sindh**, whether by virtue of agreement or otherwise.
- x) The IGP Sindh 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 endeavour 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.

AIGP/Logistics
On behalf of IGP, Sindh

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.	Quoted Specifications	Supply During (in Months)
1		

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

BIDDER (Sign + Seal)

100
3

**Technical Specification for Armored
TOYOTA HILUX 4x2 SINGLE CABIN WITH CANOPY PROTECTION
LEVEL B4+**

Armoring Details

ARMORING SPECIFICATIONS

<p>BALLISTIC SPECIFICATIONS</p>	<p>EURO B6+ / NIJ III: HIGH-POWERED RIFLE: (357) Magnum (full metal jacket, coned bullet, or soft core), 10.2 g, 425 m/s / 1450 fps. (9mm) Luger (full metal jacket, round nose or soft core), 8 g., 400 ms / 1250 fps. (44 Magnum) (Full metal jacket, flat nose, or soft core), 15.6 g, 440 m/s / 1510 fps. MP5 Sub Machine gun and 7.63x25 TT.</p>
<p>TRANSPARENT ARMOR</p>	<p>BULLET RESISTANT GLASS – LEVEL: BR4 All existing windows & glass will be removed and replaced with bullet-resistant transparent armor multi-layer glass and polycarbonate inner layer to prevent fragmentation upon ballistic impact.</p> <ul style="list-style-type: none"> • All OEM glass is replaced with flat ballistic glass. • All ballistic glass is rated to B4 Standards with Multi-Hit Certification. • Anti-spall shield protecting against shattering glass • Multiple impact protection • Finest optical quality, Minimal distortion • No de-lamination, no discoloration from UV rays Interior • All original OEM interior panels and trim will be resized or modified and re-installed wherever possible to obtain as close to an original look as possible • Ballistic Glass will be installed from inside with framing system.
<p>Opaque Armor</p>	<ul style="list-style-type: none"> • Five sided armoring of passenger compartment using Ballistic Steel material to defeat high-powered rifle fire, off Level B4, i.e MP5. • Armoring including on kick panels, Front fenders, and rear wheels walls, Firewall, A, B, door pillars and posts. • Armor consists of all welded ballistic grade composite and steel construction. • The interior frame, constructed of ballistic grade steel, provides overlap and backup protection for the large surface principle impact areas such as the doors and windows. It also reinforces the structural integrity of the pillars and other areas that are typically ignored or poorly armored by the other manufacturers.
<p>ARMORED DOOR PANELS ASSEMBLY</p>	<ul style="list-style-type: none"> • Doors, pillar posts, side panels, kick-panels, firewall, cargo compartment and headers (laterals) will be armored air hardened heat treated ballistic steel in accordance with defined standard of defeat. • This material will be installed inside the doors and cabin cavity and the original door and cabin panel will be reinstalled. • Heavy Duty door hinges, designed and manufactured for extended longevity and easy maintenance. • Heavy Duty door travel retainers.
<p>ARMORED OVERLAPS</p>	<p>Armor overlap at all doors to prevent penetration through doorposts and pillars. Overlap is used throughout to prevent gaps. Overlaps also acts as structural reinforcement to prevent doors from collapsing inside the vehicle in blast scenario. Material – Ballistic Steel</p>
<p>PASSENGER CABIN PROTECTION</p>	<p>The entire Passenger Cabin inside area shall be armored with Ballistic Steel.</p>
<p>“A”, “B” AND “C” PILLAR POST</p>	<p>Door pillars reinforced to accommodate the additional weight of the armored floor. Armored, contoured panels are installed between the front and rear seats.</p>
<p>SHIN GUARD PANELS & FIRE WALL PROTECTION</p>	<p>Vehicles Dash Board is removed and armored panels are installed under the front fenders offering protection to the feet & shin area.</p>



FLOOR PROTECTION	Floor area will be armored with a multi-ply rigid ballistic fragmentation material to protect against a single German DM-51 or U.S. M-67 grenade. Armor is concealed under the carpet and seats to maintain the original appearance of each vehicle.
ELECTRICAL SYSTEMS	All electrical equipment standards to this vehicle shall be tested and modified as necessary to protect against the armoring process. And any additional electrical equipment installed on the vehicle shall be individually fused; all wires are loomed and clearly marked, as required by vehicles safety standards.
SUSPENSION & BRAKES	Suspension components are reinforced as necessary to compensate for additional weight of the vehicle. These may include changing of bushings, coil springs, shocks & Upgraded brakes as necessary
ENGINE, BATTERY AND RADIATOR PROTECTION	<ul style="list-style-type: none"> • Vehicle Radiator is protected to Armor level as applicable. • ECM Is protected to Armor level as applicable. • Entire Engine Bay is protected to armor level as applicable
CANOPY	<ul style="list-style-type: none"> • Ballistic Canopy & bullet resistant glasses. • Water-tight escape hatch, lockable from inside, located on the roof of the vehicle. • 2 Fans, 2 Lights & seating for 6 passenger.
WEIGHT	The center of gravity (CG) is raised after armoring which can affect the stability in cornering and braking. While suspension upgrades have been completed to offset this effect, care must be taken in handling the vehicle. It is recommended that drivers are trained to handle the vehicle with the increase in weight load and change in the center of gravity position.
INCLUDED UPGRADES & MODIFICATIONS	<ul style="list-style-type: none"> • Reinforcement of hinges and door swing straps. • Suspension & Brakes upgrade.
TEST REPORTS	<ul style="list-style-type: none"> • All materials used have been certified through independent lab testing. • Test certificates may be provided on request.

Repair and Reconditioning of the APC & upgradation from level B6 to level B7 / NIJ Standard IV (AP BULLET RESISTANT)

Modification and Repair work detail:

- Body rebuilding.
- Five sided armoring of passenger compartment to provide protection against **Level B7 / NIJ Standard IV (7.62 X 51 AP. AK 47 7.62 X 39 AP) (AP BULLET RESISTANT)**
- Floor shall be fitted with blast protection to protect occupants against fragmentation from detonation of 2 DM-51 German ordnance hand grenades or equivalent light anti-personnel mines. Additional ballistic steel plating installed on the bottom of the vehicle to form a solid protective hull, providing additional blast protection to the passenger compartment as well as the drive-train components of the vehicle.
- Engine to be replaced with more powerful engine.
- Vehicle body shall be fully encapsulated to provide armor protection to occupants at all points.

Transparent Armor:

- Inter-replaceable glass modules allow for quick glass replacement with simple hand tools
- A combination of glass, polycarbonate and Mylar are bonded together using the latest technology, producing one of the finest transparent armors available while incorporating the following qualities:
- Anti-spall shield protecting occupants against shattering glass
- Multiple impact protection.
- Finest optical quality, Minimal distortion, de-lamination, discoloration from UV rays
- All exterior glass are shielded from larger projectiles such as rocks, bottles, grenades, etc. by steel mesh covers which can be removed by user for cleaning and/or glass replacement.

Doors and Locking Configuration:

- Passenger and Cargo doors shall be designed to allow quick vehicle access while minimizing the amount of vehicle interior exposure when in use.
- All doors have a dual lock system to ensure that should one fail, the doors of the vehicle will remain closed in a combat situation.
- Armor overlap at all doors to prevent penetration through door posts and pillars.
- Door pillars and hinges have to be designed specifically for this vehicle, thereby ensuring maximum strength and usability, and the ease of maintenance.
- All doors shall have weather stripping installed to prevent exterior climate from entering vehicle.

Vehicle Interior and Seating Configuration:

- All original OEM interior panels and trim shall be removed from this vehicle with the exception of the front dash and seats. These portions have to be modified to fit the new body style of the vehicle and have to be left in place to assist with driver comfort and familiarity.
- Rear section of vehicle shall be equipped with 6 strategically-placed jump seats (1 at either rear side passenger door, 4 in center facing exterior side walls) which fold up when not in use to maximize interior working/storage space.
- Original vehicle seats have to be retained in front compartment in order to maximize driver comfort and vehicle familiarity. This ensures ease of driving by multiple personnel is attained.
- All seats have to be equipped with racing harness to ensure maximum protection in the event of rollover or ramming, while still allowing ease of entry/egress.
- Alternative seating configuration shall be available to suit the end-users requirements



Climate control:

- Front cab of vehicle utilizes original climate control system with A/C.
- Rear operational area of vehicle shall have independently controlled A/C and Heating unit which ensures the rear compartment remains comfortable, even in operational arenas with a high temperature variation to extreme levels of heat and cold.
- Two exhaust fans, controlled from a switch located in the driver compartment, have to be mounted in the rear of the vehicle in order to provide additional heat dissipation from the interior, as well as easily remove any smoke and/or other airborne chemicals which may be present inside the operational area of the vehicle.

Electrical:

- NATO-style jump-start cable connectors
- Antenna mount on the roof of the vehicle

Other Design Features

- Vehicle tire jack shall be upgraded and to be located within easy access
- Vehicle interior shall equipped with large dome lights, individually controlled by switch.
- Suspension and braking systems reinforced or modified as necessary to compensate for additional weight.
- Stainless steel grille installed in tailpipe opening to prevent disabling of vehicle via insertion of foreign objects.
- 360-degree traversing turret providing NIJ level III protection, incorporating ballistic glass for improved visibility for the gunner.

