

ROBOTIC SURVEILLANCE PLATFORM

1. **Introduction.** Robotic Surveillance Platform.
2. **Background.** Security Forces (SF) as a whole and Rashtriya Rifles in particular will be facing the threat in the Built Up and Super Built Up Areas in future, Robotic Platforms will prove to be a game changer.
3. **Broad Qualitative Reqmts.** RR Directorate sought a Robotics Surveillance Platform with the following broad operational characteristics :-
 - (a) **Reqmt.**
 - (i) Provision of real time intelligence inputs for Rashtriya Rifles operations in Built Up Areas (BUA).
 - (ii) Avoiding casualty to own troops during initial breach.
 - (iii) Precise delivery of suitable munition.
 - (iv) Dynamic real time monitoring of terrorists activities during operations.
 - (b) **Functionality and Sub Components.** Functionality to be used in Built Up Areas (BUA) for gathering real time intelligence input prior to manual insertion. The sub components of the system should be as follows:-
 - (i) **Launch Unit.**
 - (aa) **Surveillance Camera.** To provide input in both day and night mode.
 - (ab) **Transmission System.** The ideal range should be between 150meters to 200 meters.
 - (ac) **Munition Delivery.** The platform must be capable of delivering a suitable munition at the intended target, e.g. grenade.
 - (ii) **Control Unit.** For control and monitoring.
 - (c) **Operational Parameters.** The operation parameters of the system should be as follows:-
 - (i) **Light Weight and Rugged.** Man portable (light weight) and throwable (minimal weight : less cont unit & payload). At the same time, the system has to be shockproof to withstand the above conditions.
 - (ii) **Obstacle Negotiation.** Stair climbing and obstacle negotiation capability to be incorporated.
 - (iii) **All Weather.** The system should be all weather and water proof.
4. **Tentative Quantity.** Approx 550 initially.
5. **Tentative Timelines for Development/Production.** One year.