

Emergency Relief Constellation Request for Proposal (9-26-2016)

The Humphrey and Prudence Trickelbank Foundation was established to support disaster relief activities around the world. The Foundation is considering a major investment to create a rapid reaction satellite constellation to assist relief efforts around the world. For political reasons, the system is not to be prepositioned in orbit and will only be deployed in the event of a major natural disaster. The Foundation is requesting proposals from industrial suppliers to determine the feasibility and expected cost of the constellation. Final responses to this RFP should describe the preliminary design of the proposed system including expected performance, development schedule and ROM cost.

System Requirements:

The system must provide imaging and communications capabilities over a disaster area. System requirements are as follows:

- Minimum lifetime (95% of required capability): 6 months
- Coverage area: 500km x 500km anywhere in the world
- Response time: Initial operations (25% of full capability): 12h
Fully operational: 24h
- System can not be pre-deployed in orbit
- Launch systems must operate in politically stable locations
- Proposed system must include all ground equipment and installations required to deploy and operate the constellation
- System must comply with all applicable U.S. and international regulations

Communications:

- Provide beyond line of sight communications repeater to first responders
- Support for entire coverage area
- Compatible with existing tactical UHF communication systems
- Provide repeater capability for a minimum of 10 minutes every hour
- Maximum time without repeater access 120 minutes
- Minimum usable communications window 3 minutes

Imaging:

- Required max pixel resolution <5m
- Bands of interest: Visible, near IR and thermal IR
- Daylight pictures of any point in the coverage area 4 times a day
- Images must be made available to the relief coordination center as quickly as possible
- Max. time without access to images of coverage area: 8 hours (including night)

Notices of intent are requested from all entities interested in responding to the RFP no later than 5:00pm (EST) October 7th, 2016. NOIs and all questions regarding this RFP must be submitted to the Foundation at the following email: trickelbank.foundation@gmail.com. Questions may be shared with all suppliers interested in the RFP.

DO!!! * Send questions by Friday
Find requirements.
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