

DEPARTMENT OF THE NAVY
NAVAL POSTGRADUATE SCHOOL
1411 GL-342
Bldg. 302
MONTEREY, CALIFORNIA 93943-5101

FAR PART 13.5
TEST PROGRAM FOR CERTAIN COMMERCIAL ITEMS
JUSTIFICATION AND APPROVAL
FOR USE OF SOLE SOURCE

1. Contracting Activity.

2. Description of the Action Being Approved.
Contract to Virginia Tech to fund Dr. Charles Clancy to perform research and engineering on the Android operating system to make the system more resistant to malware, as a part of a larger portfolio of tools to improve the ability for the US Navy and Department of Defense to use smartphones in both tactical and non-tactical scenarios supporting the overall defense mission. The development of this technology will necessarily involve the development of additional technology usable for computer forensics and cell phone exploitation capabilities.

3. Description of Supplies/Services.

Status and Financial reports that include man hours and tasks completed, delivered monthly.

Detailed technical reports supported by findings and evidence, delivered quarterly.

Information and Ad-Hoc technical discussions, delivered weekly.

Final Program report, due on program completion.

Copies of technical papers submitted and published.

Copies of developed software per statement of work.

Program review meetings.

4. Statutory Authority Permitting SOLE SOURCE.

Section 4202 of the Clinger-Cohen Act of 1996 - a sole source acquisition under the authority of the test program for certain commercial items, as implemented by FAR 13.501(a).

5. Rational Justifying Use of Cited Statutory Authority.

Although there has been one published article on the use of SELinux on Android phones, there appears to be no functioning prototype. Dr. Clancy has extensive experience in this area and is currently constructing a research program at 900 N. Glebe, where Naval Postgraduate School has research offices. At least two collaboration agreements between NPS and Virginia Tech have been executed or are pending. Virginia Tech's research in this area will be directly usable by NPS faculty and students sharing the same facility.

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6. Description of Efforts Made to Solicit Offers from as Many Offerors as Practicable.

NPS has an open solicitation on its website encouraging potential offerors to submit research proposals.

PI Garfinkel the subject matter expert, has appeared at numerous conferences over the past year and has stated publicly that the Naval Postgraduate School is looking for research collaborators.

PI Garfinkel has personally requested research proposals from a variety of researchers in the field.

7. Unusual and Compelling Urgency.

The increased use of smart phones by USG employees in both their official and personal capacities increases the benefit that DOD adversaries can realize by planting malware on these devices. Although there exists some anti-virus and anti-malware technologies for smart phones, these are largely based on a "black listing" approach and do not address novel threats. The National Security Agency has spent significant sums developing Security Enhanced Linux (SELinux). To date, however, Linux-based smart phones such as Android have not adopted the technology.

The Department of Defense also encounters significant numbers of smart phones during the course of intelligence and battlefield operations. Currently these phones are analyzed using primitive techniques that can be circumvented by sophisticated

adversaries. DoD is urgently in need of new technologies for analyzing smart phones, especially phones based on the Android operating system.

8. Determination of Fair and Reasonable Cost.

The costs proposed by Virginia Tech are in line with costs at other research universities.

9. Actions to Remove Barriers to Future Competition.

The results of this contract will be publicized at conferences and published in academic journals. Open source software resulting from this contract will be made freely available. Other academics will be free to build upon it.

CERTIFICATIONS AND APPROVAL

TECHNICAL/REQUIREMENTS CERTIFICATION

I certify that the facts and representations under my cognizance which are included in this Justification and its supporting acquisition planning documents, except as noted herein, are complete and accurate to the best of my knowledge and belief.

Technical Cognizance:

Signature: Simson L. Garfunkel

Date: June 16, 2011

Requirements Cognizance:

Signature: _____
Date: _____

(Note that this page includes certification that the acquisition planning documents are complete and accurate.)

(If a single individual has cognizance over both technical and requirements information included in the J&A, use of only one signature line is encouraged ["Technical Cognizance:" and Requirements Cognizance:" may also be deleted]).

LEGAL SUFFICIENCY REVIEW

I have determined this Justification is legally sufficient.

Signature Name (Printed) Phone No. Date

CONTRACTING OFFICER CERTIFICATION (\$150K - \$550K)

I certify that this Justification is accurate and complete to the best of my knowledge and belief.

Luis De la Fuente LUIS DE LA FUENTE 619-532-2869 9/9/11
Signature Name (Printed) Phone No. Date