

OSAC Research Needs Assessment Form

| Title of research need: | Factors Affecting Image Quality When Extracting a Still from Video | | | m Video |
|---|--|-------|----------------|---------|
| Keywords: | | | | |
| Submitting subcommittee(s): | | VITAL | Date Approved: | 1/28/16 |
| (If SAC review identifies additional subcommittees, add them to the box above.) | | | | |

Background information:

1. Description of research need:

Images extracted from video sources appear to differ in quality when the same video data is visualized on different computer systems using the same extraction technique as well as different extraction techniques. Research is needed to determine if computer hardware is a factor affecting image quality when extracting images from video.

2. Key bibliographic references relating to this research need:

| Retrieval of Video Evidence and Production of Working Copies from Digital CCTV Systems v2.0 |
|---|
| Publication No 66/08 – Home Office Scientific Development Branch |

3a. In what ways would the research results improve current laboratory capabilities?

It would assist in determining and evaluating technology for purchase by a laboratory to process video evidence.

3b. In what ways would the research results improve understanding of the scientific basis for the subcommittee(s)?

It would assist in establishing standards for video forensic analysis process of creating a working copy from proprietary video data.

3c. In what ways would the research results improve services to the criminal justice system?

Ι

| It would allow for the assertion that the quality was maintained during the process of creating a | |
|---|--|
| working copy. | |

4. Status assessment (I, II, III, or IV):

| | Major gap in current knowledge | Minor gap in current knowledge |
|---|---|---|
| No or limited current research is being conducted | I | III |
| Existing current research is being conducted | п | IV |

This research need has been identified by one or more subcommittees of OSAC and is being provided as an informational resource to the community.

| Subcommittee | Approval date: 1/28/16 | | |
|--|------------------------|--|--|
| (Approval is by majority vote of subcommittee. Once approved, forward to SAC.) | | | |
| SAC | | | |
| 1. Does the SAC agree with the research need? Yes 🗵 No 🔿 | | | |
| 2. Does the SAC agree with the status assessment? Yes 🕲 No 🔿 | | | |
| If no, what is the status assessment of the SAC: | | | |
| Approval date: 6/15/16 | | | |
| (Approval is by majority vote of SAC. Once approved, forward to NIST for posting.) | | | |
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