



U.S. DoD 5220.22-M (E)

A standard was developed by the Defense Security Service (DSS) to solve the problem of permanent removal of data. This is also used by many commercial enterprises. Under the National Industrial Security Program (NISP) representatives of the Industrial Security presented their security programs. As a part of these NISP the DSS developed the DoD 5220.22-M standard (National Industrial Security Program Operating Manual - NISPOM), which is used in almost every software deletion tool.

This wipe algorithm uses three write runs:

- pass 1: overwrite the data with a defined fixed value
- pass 2: overwrite the data with the complement value of the first run
- pass 3: overwrite the data with pseudo random values

The regulations of the US Department of Defense refer expressly to the deletion of information on media with the military classification "Secret" or "TOP-Secret" which is not approved with this method. For lower classifications, this method is, sufficient.

U.S. DoD 5220.22-M (ECE)

This method is an extended variant of the DoD 5220.22-M. This variant of the DoD Standard uses for overwriting the data seven runs. Here the data is overwritten two times by using the DoD 5220.22-M (E) standard and one time with random value DoD 5220.22-M (C).

The sequence of the runs is like the following:

- pass 1 - 3: overwrite the data with the DoD 5220.22-M (E) Standard
- pass 4: overwrite the data with pseudo random values, the DoD 5220.22-M (C) Standard
- pass 5 - 7: overwrite the data with the DoD 5220.22-M (E) Standard