E-resource topics: New record needed for change from CD-ROM to DVD format?

Two situations:

1) The CD-ROM and DVD-ROM are different simultaneous publications in different formats.
2) The CD-ROM and DVD-ROM are successive changes in format.

Current guidelines:

- Footnote to LCRI 21.3B: For an electronic resource, also make a new record if the change is from CD-ROM to DVD-ROM.
- CONSER Cataloging Manual, 30.18: CONSER is considering a change from CD-ROM to DVD-ROM optical formats as a change that would require the creation of a new record.
- SCCTP Advanced Serials Cataloging Manual: Changes in the SMD would involve a CD-ROM moving to online format or to a DVD-ROM.

Questions/Issues for discussion:

Is one record sufficient?

Is there enough of a difference between CD-ROM and DVD-ROM that CONSER libraries should create separate records for the different formats?

Is this a change in SMD (both discs are “computer optical disc”)?

Should we use one record for publications that actually do change format within the same GMD?

Since different equipment would be required, would that be sufficient to justify separate record? As far as what equipment would be required, even if the same physical medium is maintained through a publication's life, the computer resources required (operating system, RAM, monitor, browser or PDF reader, etc.) may change.

Combining different simultaneous formats on one record under one ISSN would be problematic for publishers and distributors, and buyers; they might be more open to possibilities of the same record and ISSN covering successive changes in format (although libraries would still face the problem of determining whether a case in hand represented the former or the latter).

What is gained by creating a new bib record for a direct access electronic resource that is staying a direct access electronic resource, when any one given issue is only in one medium?
Keep current rule as it is, Change of physical format >> Change of record, because it is simple to apply and it’s impossible to determine whether multiple formats were simultaneous or successive.

Extreme example illustrating problem with applying LCRI 21.3B:

- Direct access electronic serial
  - [began with 1st issue on 8 in. floppy]
- Direct access electronic serial (5.25 in.)
- Direct access electronic serial (3.5 in.)
- Direct access electronic serial (CD-ROM)
- Direct access electronic serial (DVD-ROM)
- Direct access electronic serial (Blu-Ray)
- Direct access electronic serial (Holographic cube)

Would we rather see additions/changes to the 300 field, notes, and 00X fields, within one bib record?