Date: Mon, 12 Nov 2007 12:02:48 -0700 (MST) From: "Mark V. Sykes" <sykes@psi.edu> Reply-To: sykes@psi.edu Subject: Some key questions for PDS4 To: pds\_mc@nssdc.gsfc.nasa.gov, sjoy@igpp.ucla.edu, emily.s.law@jpl.nasa.gov, susan.hoban@gsfc.nasa.gov, slavney@rsmail.wustl.edu

It seems to me that a basic issue has yet to be decided that provides a major constraint on what PDS4 is and how it should be developed:

o Should PDS4 be required to be backwards compatible?

There has been concern expressed about the potential cost and inadequate resources for implementing a non-backwards compatible system. To what extent do those costs depend upon the details of PDS4? What are the benefits of developing PDS4 de novo? Would it be of value even if it is not implemented by providing important guidance for the improvement of PDS3? Is it possible that a 'clean' PDS4 would offer efficiencies and capabilities that would effectively recover its implementation costs over a reasonably short period? Could the value of PDS to users (and NASA) be so improved by PDS4 that it would be worth the investment even if the implementation costs are not recovered? Should this decision be impacted at all by the adoption of PDS3 by PSA? If so, are we locked into PDS3 forever?

Mark