Ref	PS1		Submitted	Peter Shames
Comment	The Subnetwork Services charter needs to explicitly recognize the requirements for timeliness, jitter, and latency as QoS in Goal 6.			
Disposition	Reject			
Justification	Goal 6 seeks to elicit opinions on what the QoS parameters are, making these parameters explicit in the goal would prejudge the issue.			

Ref	PS2		Submitted	Peter Shames
Comment	Sec 3.2 would benefit from clarification of the distinct concepts of device specific and device independent access mechanisms. It might be useful to introduce the concept of device classes.			
Disposition	Accepted			
Justification	Paragraph added to 3.2.1			

Ref	PS3		Submitted	Peter Shames
Comment	The use of the terms File Store and File Service in section 3.5 are confusing. Sometimes the two terms are interchanged, as in sec 3.5.4.2 and 3.5.4.3. Is it Minimum File Store or Minimum File Service? And what is FS, File Store or File Service, it is not defined?			
Disposition	Accepted			
Justification	Terminology has been rationalised.			

Ref	PS4		Submitted	Peter Shames
Comment	Sec 2.6 says there is a mandatory set of compliance capabilities for any service. Section 4.1 says that all is optional. This may be the situation because this Sub-network layer really includes service elements that are associated with different device classes and their capabilities rather than with more typical subnetwork communications services. These really should be split out into separate service layers.			

Disposition	Partially Accepted
Justification	Mandatory Packet Service in 2.6 removed. It is not the case that the SN Packet Service underlies the other SN services. Rather the other services are less rich than the Packet service and make more use of native Datalink capabilities.

Ref	PS5		Submitted	Peter Shames
Comment	Sec 4.2 needs to clearly define how any of these data link and service differences will be defined in a MIB (as mentioned in sec 2.5) or accessed via any sort of management service interface. It makes sense to defer the specification of this service management interface, but use of a MIB to deal with managed parameters is a good near term approach.			
Disposition	Accepted			
Justification	The Protocol Conformance Statement Proforma and accompanying MIB description will be mandatory for inclusion in any protocol specification claiming to implement SOIS SN Services. Text has been inserted to this effect. The MIB is populated by a number of means and is independent of any concept of management service interface. Text added to 2.5.			

Ref	PS6		Submitted	Peter Shames
Comment	In sec 4.2 the interactions among the retry, resource reservation, prioritization, and protocol muxing functions appear somewhat confused. If the real interface to any given sub-net implementation has to expose an interface that offers these as service parameters then this should be clearly stated. The issues between what are really sub-network transfer services and what are really device specific services becomes apparent here as well.			
Disposition	Partially accepted.			
Justification	In drafting the Red Books it has become apparent that, for the packet service, some of these aspects are apparent in the service parameters whereas for the more primitive (sic) services they are not exposed and are aspects of non-observable underlying function performing service and QoS reconciliation. Service parameters are given in the service Red Books. Text has been added to 2.3.3 to clarify domain of QoS.			

Ref	PS7		Submitted	Peter Shames
Comment	Sec 1.6 is missing at least 20 terms that are used somewhat casually elsewhere in the document. These include at least the following: device dependent, device virtualization, data link, application, data pool, network, transport, RMAP, SAP, FPGA, address, contention, RTOS, FIFO, MET, discrete message.			
Disposition	Accepted			
Justification	Definitions are being added			

```
                REVIEW ITEM DISPOSITION (RID):
                      RID INITIATION FORM

YOUR RID NUMBER: 1
SUBMITTING AREA DIRECTOR:  Space Internetworking Services
-------------------------------------------------------------------
DOCUMENT NAME:      "SOIS Green Book" CCSDS 850.0-G-0b
DATE ISSUED:        November 2006
PAGE NUMBER:        Various  PARAGRAPH NUMBER:  Various
RID SHORT TITLE:    Editorial corrections
-------------------------------------------------------------------
DESCRIPTION OF REQUESTED CHANGE:  (Use From: "..." To "..." format)
```
Sec 1.2 rational->rationale

Sec 1.4 EGSE -- expand acronym on first use, please.(Or rather, since it's only used once, why not just skip it and replace with the expanded phrase?)

Sec 1.6: "Heterogeneous network—A network that uses one or more underlying communications protocols," From dictionary.com: 1. different in kind; unlike; incongruous. 2. composed of parts of different kinds; having widely dissimilar elements or constituents. How can a network using ONE kind of underlying communication protocol be considered heterogeneous? Change "one" to "two."

Sec 1.7 -- is it appropriate to reference a Green Book that hasn't been written yet? Will this book be far enough along to have a number by the time this document is published? Will anything relevant to this reference be publicly accessible at the time this document (850x0g0b) is published? If not, it should probably be removed as a reference.

Sec 3.2.2.1   Device Dependant Driver -> Device Dependent Driver

```
-------------------------------------------------------------------
RATIONALE:
```

These RIDs are intended to improve the document's readability.

DISPOSITION:

All Accepted

```
                 REVIEW ITEM DISPOSITION (RID):
                      RID INITIATION FORM

YOUR RID NUMBER: 2
SUBMITTING AREA DIRECTOR:  Space Internetworking Services
------------------------------------------------------------------
DOCUMENT NAME:     "SOIS Green Book" CCSDS 850.0-G-0b
DATE ISSUED:       November 2006
PAGE NUMBER:       PARAGRAPH NUMBER:  1.3
RID SHORT TITLE:   Applicability
------------------------------------------------------------------
DESCRIPTION OF REQUESTED CHANGE:  (Use From: "..." To "..." format)

From:
```

The SOIS standardised services are intended to be applicable to all classes of missions, including scientific and commercial spacecraft, and manned and un-manned systems.

```
To:
```

The SOIS standardised services are intended to be applicable to all classes of civil missions, including scientific and commercial spacecraft, and manned and un-manned systems. These standardized services may apply to military missions, although military security requirements have not been considered in their specification.

```
------------------------------------------------------------------
RATIONALE:
```

Stating applicability to ALL types of missions may be inappropriate: if military missions are in scope, then the security requirements may dominate the service specifications, particularly if wireless media are in use onboard the spacecraft.

```
------------------------------------------------------------------
DISPOSITION:
```
Delegated upwards. There may be constitutional problems. Boilerplate will be revisited at Secretariat level.

REVIEW ITEM DISPOSITION (RID):
                         RID INITIATION FORM

YOUR RID NUMBER: 3
SUBMITTING AREA DIRECTOR: Space Internetworking Services

DOCUMENT NAME: "SOIS Green Book" CCSDS 850.0-G-0b
DATE ISSUED: November 2006
PAGE NUMBER: 3-2 - 3-12 PARAGRAPH NUMBER: 3.2 - 3.6
RID SHORT TITLE: Application Support Service characteristics

DESCRIPTION OF REQUESTED CHANGE: (Use From: "..." To "..." format)

In section 3.4 the description of the MTS service asserts that it provides
"discrete messaging with a bounded latency" and asserts on (all) lower layers
a requirement for time-bounded delivery. Yet the remainder of the description
of this service is focused on a FIFO priority-order discipline. I strongly
suggest that this section reconsider its repetitive statements that messages
will be served in FIFO order within a priority level (particularly since
section 4.2.5 leads the reader to believe that time-bounded delivery and
priority are mutually exclusive). This is overly prescriptive for a Green
Book.

For each application support service described in this Green Book, some
consistent service characteristics would be helpful:

1) Does the service guarantee completeness? Correctness? Preservation of
sequence between messages? Bounded-latency delivery? With preemption?
Priority-ordered delivery?

2) Are any services or service qualifiers mutually-exclusive? For example,
it appears that priority and bounded-latency delivery cannot both be
requested. Is this so? How can I tell from this document? If there are
service qualifiers that are mutex (e.g., A, B, and C), may I request any of
them (A, or B, or C)? Or are there further restrictions on selection?

To resolve this RID,

    1) Revise the Application Support Service descriptions so they are
       consistent across the services, and so that they refrain from
       describing a service in terms of its implementation.
    2) Describe service "qualifiers" (e.g., priority, completeness,
       correctness, sequence preservation, bounded-latency delivery)
       separately, noting whether any of these qualifiers are mutually
       exclusive.
    3) For each application support service, note which service qualifiers are
       available, unavailable, etc. and if any combinations of service
       qualifiers are required or prohibited, note those.

RATIONALE:

The description of application support services in a Green Book should be
consistent across the services, refrain from over-specification, and give the
reader information to help determine whether this service will be useful to
the reader's application.

DISPOSITION:

Accepted, consistency within applications services and, where
applicable, with SN services will be provided. To be stated in the app
support service red books.

```
                    REVIEW ITEM DISPOSITION (RID):
                         RID INITIATION FORM

YOUR RID NUMBER: 4
SUBMITTING AREA DIRECTOR:  Space Internetworking Services
-------------------------------------------------------------------
DOCUMENT NAME:     "SOIS Green Book" CCSDS 850.0-G-0b
DATE ISSUED:       November 2006
PAGE NUMBER:       4-3          PARAGRAPH NUMBER:  4.2.3
RID SHORT TITLE:   Implementation detail in description
-------------------------------------------------------------------
DESCRIPTION OF REQUESTED CHANGE:  (Use From: "..." To "..." format)
```

4.2.3   The following statement specifies implementation rather than service: "If multiple copies of the same PDU arrive at the destination, i.e., the first PDU arrived after the initial time-out, any duplicates are discarded."

Revise sentence to read: "Only one copy of a PDU will be delivered to the user at the destination."

It would be useful to note also whether this service preserves the order of PDUs, guarantees that the PDUs received are identical to the PDUs transmitted (e.g., via a CRC or some other mechanism), etc.

```
----------------------------------------------------------------
RATIONALE:

It is important to describe the service and not its implementation.

----------------------------------------------------------------
DISPOSITION:


Accepted, with the revised terminology that "only one copy of an SDU
will be delivered to the user". Sequence preservation, completeness,
with/without errors are addressed, as per their conventional
semantics, in the SN service services Red Books.
```

YOUR RID NUMBER: 5
SUBMITTING AREA DIRECTOR: Space Internetworking Services

DOCUMENT NAME: "SOIS Green Book" CCSDS 850.0-G-0b
DATE ISSUED: November 2006
PAGE NUMBER: 4-4   PARAGRAPH NUMBER: 4.2.5
RID SHORT TITLE: Bounded latency requires reservation

DESCRIPTION OF REQUESTED CHANGE: (Use From: "..." To "..." format)

4.2.5 -- Is it the case that I can't request a bounded latency message transfer without establishing a resource reservation? Is the transfer of a single bounded latency message more likely to fail as a result of this condition (due to unavailability of resources available for *reservation* that might be available for use at the moment the message is offered for transmission)?   Resource reservation seems appropriate for sequences of messages, but not appropriate for single messages. Are separate (bounded-latency datagram, bounded-latency stream) services required?

RATIONALE:

This seems like a lot of overhead if I have only a single, deadline-critical
message to send to a remote application (such as a caution & warning message,
an alert, or whatever.

DISPOSITION:

Bounded latency is managed by a combination of resource reservation
and prioritizations. This will be clarified in the QoS Green Book.

```
                    REVIEW ITEM DISPOSITION (RID):
                         RID INITIATION FORM

YOUR RID NUMBER: 6
SUBMITTING AREA DIRECTOR:  Space Internetworking Services
------------------------------------------------------------------
DOCUMENT NAME:      "SOIS Green Book" CCSDS 850.0-G-0b
DATE ISSUED:        November 2006
PAGE NUMBER:        4-4        PARAGRAPH NUMBER:  4.2.6
RID SHORT TITLE:  Prioritization function availability
------------------------------------------------------------------
DESCRIPTION OF REQUESTED CHANGE:  (Use From: "..." To "..." format)
```

4.2.6 -- Is the Prioritization Function available for Reserved and/or Guaranteed Traffic Classes? One can infer from section 4.2.5 that it is not.

```
------------------------------------------------------------------
RATIONALE:

Clarification.


------------------------------------------------------------------
DISPOSITION:


It is available according to the SN service Red Books. 4.2.5 has been
revised to reflect.
```

```
                    REVIEW ITEM DISPOSITION (RID):
                        RID INITIATION FORM

YOUR RID NUMBER: 7
SUBMITTING AREA DIRECTOR:  Space Internetworking Services
-------------------------------------------------------------------
DOCUMENT NAME:     "SOIS Green Book" CCSDS 850.0-G-0b
DATE ISSUED:       November 2006
PAGE NUMBER:       4-4         PARAGRAPH NUMBER:  4.2
RID SHORT TITLE:   Bounded Latency description
-------------------------------------------------------------------
DESCRIPTION OF REQUESTED CHANGE:  (Use From: "..." To "..." format)
```

Why is there not a section 4.2.7 that describes the "Bounded Latency" function, in the same manner that 4.2.6 describes the "Prioritization" function?

```
-------------------------------------------------------------------
RATIONALE:

Clarification.


-------------------------------------------------------------------
DISPOSITION:
```

There is no bounded latency function because the functions which provide bounded latency are the resource reservation and prioritization functions.

```
REVIEW ITEM DISPOSITION (RID):
                              RID INITIATION FORM

YOUR RID NUMBER: 8
SUBMITTING AREA DIRECTOR:  Space Internetworking Services
------------------------------------------------------------------
DOCUMENT NAME:      "SOIS Green Book" CCSDS 850.0-G-0b
DATE ISSUED:        November 2006
PAGE NUMBER:        4-6        PARAGRAPH NUMBER:  4.3.1.2
RID SHORT TITLE:    System-wide logical addressing
------------------------------------------------------------------
DESCRIPTION OF REQUESTED CHANGE:   (Use From: "..." To "..." format)
```

4.3.1.2 -- What does the following mean? "Addressing is performed using system-wide logical addressing which is translated to the physical addresses used in the Data Link layer." What does "system-wide" mean? Does it mean CCSDS-wide? Agency-wide? Spacecraft-wide? Module-wide? Subsystem-wide? Is there a SANA requirement embedded in this "system-wide logical addressing"? Is "system-wide logical addressing" somehow covered in Section 2.4? If so, please use consistent terminology. If not, please add it to section 2.4.

```
------------------------------------------------------------------
RATIONALE:

Clarification.


------------------------------------------------------------------
DISPOSITION:


This is, indeed, inconsistent with section 2.4. Text in 4.3.1.2 has
been removed. Red books use conventional SNSAP address conventions at
the service interface.
```