GIST over SCTP
<draft-ietf-nsis-ntlp-sctp-02>

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Open issue 1: Why SCTP

- GIST supports multi-transports
- Add SCTP as transport protocol for GIST and benefit from the rich transport features desired by signaling protocols:
  - Multi-streaming, multi-homing: if multiple sessions have different reliability requirements they can be allocated to different streams, or even allow load sharing for different sessions in multi-homed environments
  - Avoiding HOL blocking
    - A same GIST MA may be reused by multiple sessions
    - When using TCP as transport, GIST signaling messages belonging to different sessions may be blocked if another message is dropped
- Partial-reliability
Changes since 01-version

• Added some explanations on SCTP benefits
• Updated security considerations
Open Issue: security

• Option 1: using TLS over SCTP (RFC3436, Dec 2002)
  – Implemented, works well
  – Aka SIP’s uses of TLS over SCTP (RFC4168, Oct 2005)
  – Open issue: PR-SCTP unsecured (cannot use TLS)

• Option 2: using DTLS directly (RFC4347, Apr 2006)
  – Introduce a DTLS for GIST document (like GIST over SCTP)
  – Clean approach while enabling all SCTP nice features
  – No dependence to base on DTLS over SCTP proposal
    (draft-tuexen-dtls-for-sctp-02, Nov 2007)