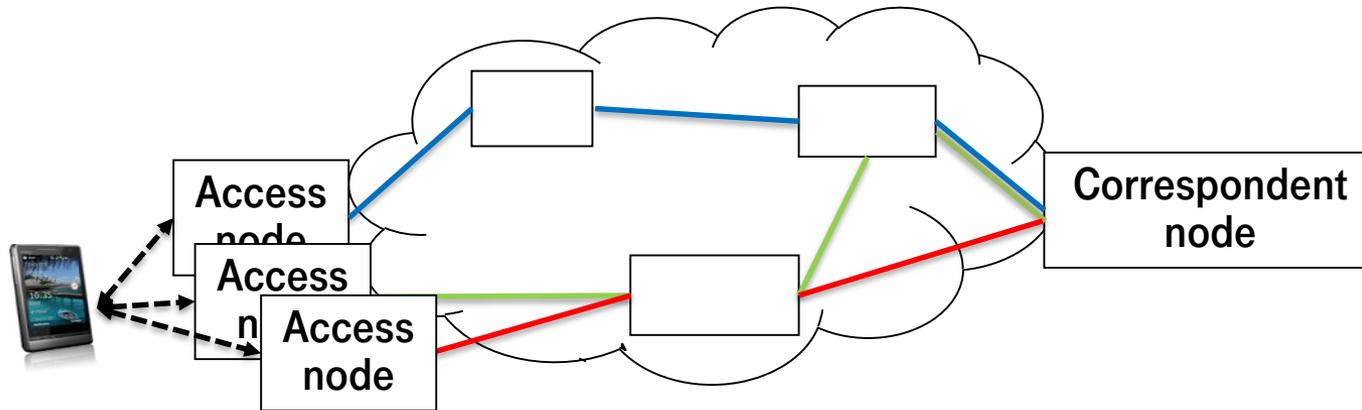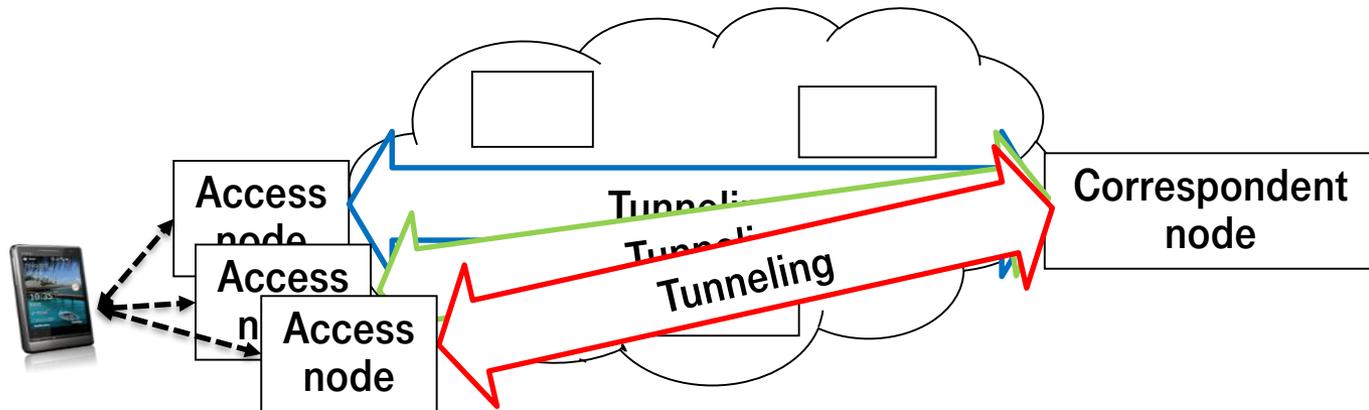# Privacy issues with tunneling alternatives in next generation systems

IETF#102 HotRFC session in Montreal
Dirk v. Hugo, DTAG

Tunneling vs. Id/Loc separation system

Identifier/Locator (Id-Loc) separation systems as tunneling alternatives

- In future network concepts more efficient differentiation of packet handling according to specific service demands (QoS) are expected.

- Traditional tunneling and encapsulation between IP addresses (= Id and/or Loc) have disadvantages – one size doesn't fit all needs.

- Separation between (fixed) Id and (dynamic) Loc is proposed to find optimum path for data packets to/from moving devices.

- But: absolute or relative location per identifier is sensitive privacy information posing new risks and vulnerabilities to attacks.

- Privacy enforcement is required for any Id-Loc separation use!

- Some drafts are published and announced on ML 5GangIP.

- A new ML will be created (provisionally called Idloc).

- Please join the discussion!

Thank you.

Back-up: Privacy related drafts on Id-Loc separation systems

- Privacy issues in ID/locator separation systems, draft-nordmark-id-loc-privacy, July 2018

- Lightweight Identifier-Locator Mapping Using FAST (Firewall and Service Tickets), draft-herbert-idloc-fast-00, June 2018

- Gap and Solution Space Analysis for End to End Privacy Enabled Mapping System, draft-xyzy-atick-gaps-01, June 2018

- Problem Statement for Secure End to End Privacy Enabled Mapping System, draft-xyz-atick-ps-01, June 2018

- LISP (Locator/ID Separation Protocol) EID (End-Point ID) Anonymity, draft-ietf-lisp-eid-anonymity-02, Apr. 2018

- Gap Analysis for Identity Enabled Networks, draft-xyz-ideas-gap-analysis-00, July 2017

- Identifier-Locator Network Protocol (ILNP) Architectural Description, RFC 6740, Nov. 2012