

What is new as of March 2018?

- › Transport layer (QUIC?)
 - › the discussions did not start yet. This will come up later this year
 - › I will not have anything detailed on this even in Montreal and even by the end of the year we can only expect studies, i.e. no firm conclusions.
- › to evolve HTTP/2 is adopted as the application layer protocol for the service based interfaces
- › User plane transport (GTP-U vs ...) is same as above, expect only studies and no firm conclusions
- › A new study item in CT4 on the user plane transport protocols, i.e. GTP-U vs SRv6 and others (in dmm)

5G SBA Protocols – So far no change

- › HTTP/2 is adopted as the application layer protocol for the service based interfaces
- › TCP is adopted as the transport layer protocol;
- › Use of QUIC, binary encoding (e.g. CBOR) and other aspects are left FFS for possible support in future releases
- › JSON is adopted as the serialization protocol;
- › RESTful design whenever possible and custom methods otherwise;
- › 2 HTTP client-server pairs to support notifications;
- › OpenAPI 3.0.0 as Interface Definition Language (IDL)

Northbound APIs (NAPS) – So far no change

- › NEF – Network Exposure Function
- › Core Network capabilities exposed to 3rd parties
- › Service specific
 - › e.g. oneM2M specific (NAPS)
- › Framework study currently ongoing (SA6)
- › Also here: HTTP & REST

4G + 5G NAPS / API – So far no change

- › T8 interface exposes a set of APIs, each of which has a dedicated data model and resource structure and can be evolved independently
- › Common URI structure, structured data types, error handling
- › Protocol: HTTP 1.1 shall be supported and HTTP/2 should be supported
- › Transport: TCP
- › Serialization protocol: JSON
- › API design style: RESTful whenever possible.
- › Support of notification with two HTTP client/server pairs
- › No decision on whether other mechanism is required to allow firewall traversal for northbound APIs
- › IDL: OpenAPI v3.0.0