

Asset-Network Layers Model for SATP Stage-Zero

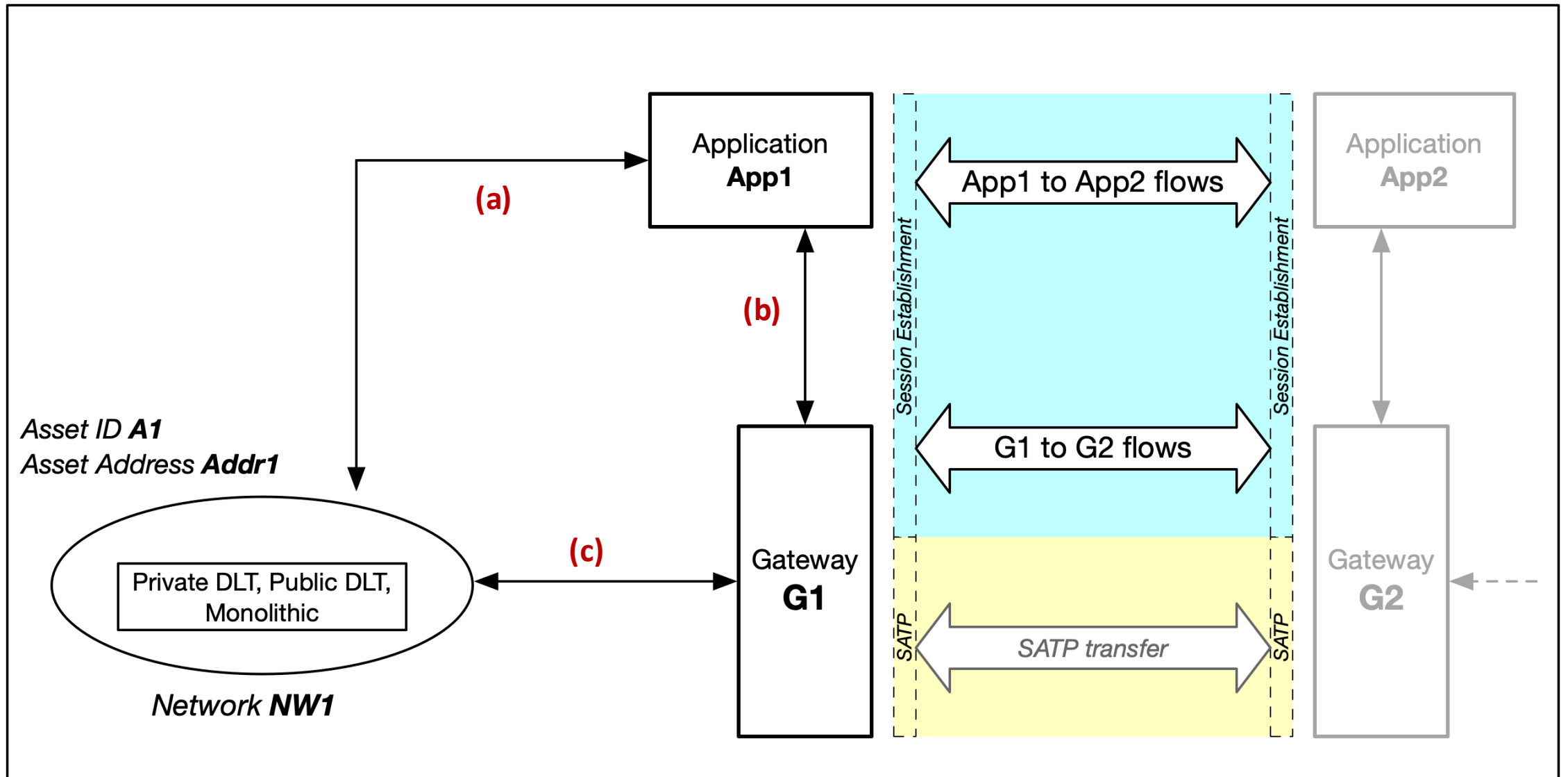
SATP Working Group
IETF123 Madrid
21 July 2025

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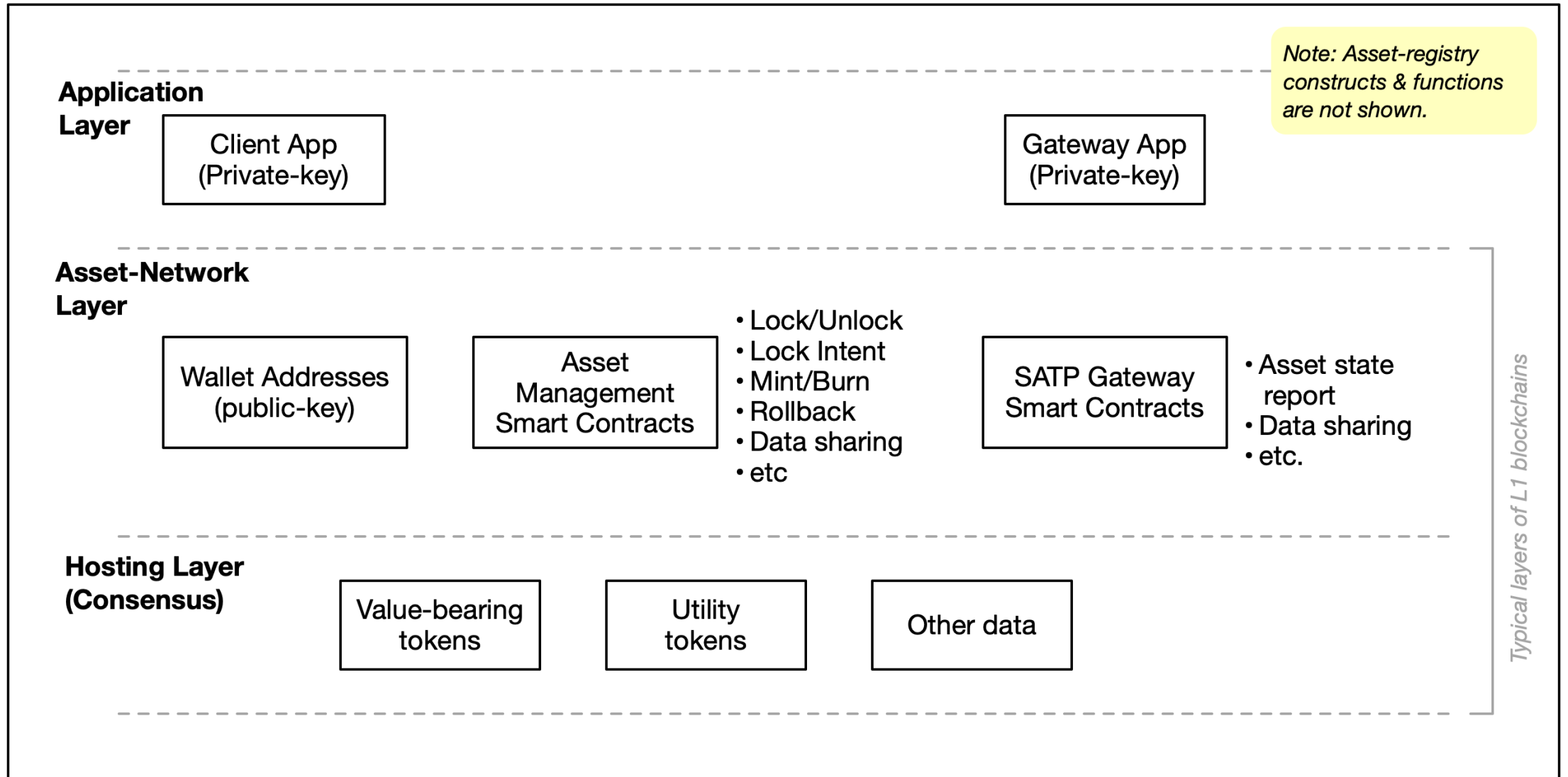
Problem Statement

- SATP requires Gateways to carry-out tasks on the asset-network (e.g., lock)
 - Client/App1 interacts with both the asset-network NW1 and the selected Gateway G1
 - Software (GW-App) at G1 interacts with network NW1
- However, it is unclear at which “layer” of the network the Apps and the Gateways interact with the network
 - e.g., Unclear what the gateway is actually calling to at the network
- Need a common understanding of the layers of the asset-network and functions at each layer

Overview of Stage-0 (Blue)



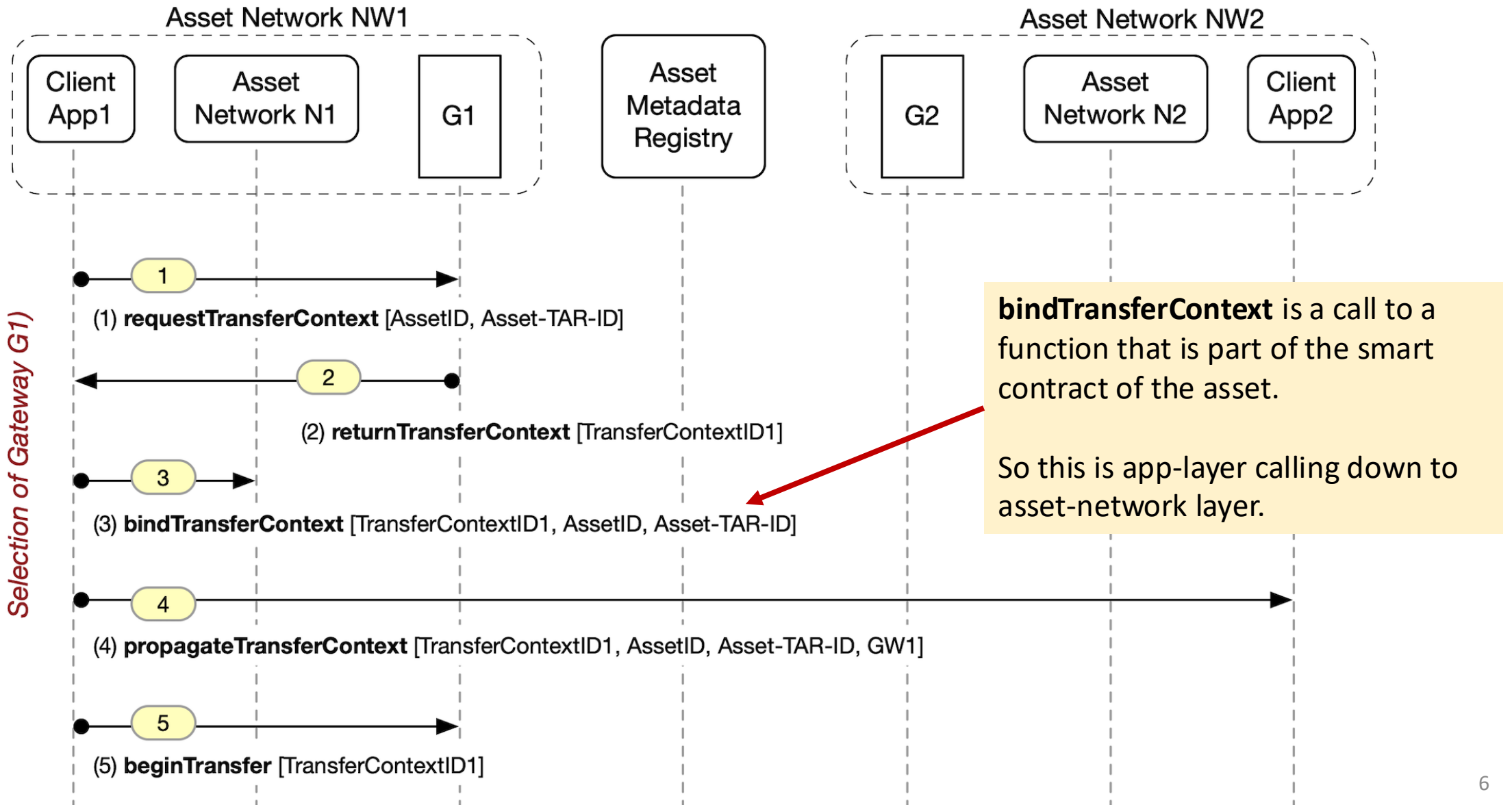
Layers & Constructs (High-Level)



Why is a common layer model important

- Clarity in protocol design
 - Unambiguous definition of a function (i.e. smart contract) and which layer it operates at
 - Prevent layer violations
 - Enable consistency of gateway logic & implementation
- Shared semantics of common functions at each layer
 - e.g. meaning of “lock” in NW1 versus in NW2

Example



Next Steps

- Write a short informational draft about the “layers”
- Possibly part of a Terminologies draft

Thank You and Q&A