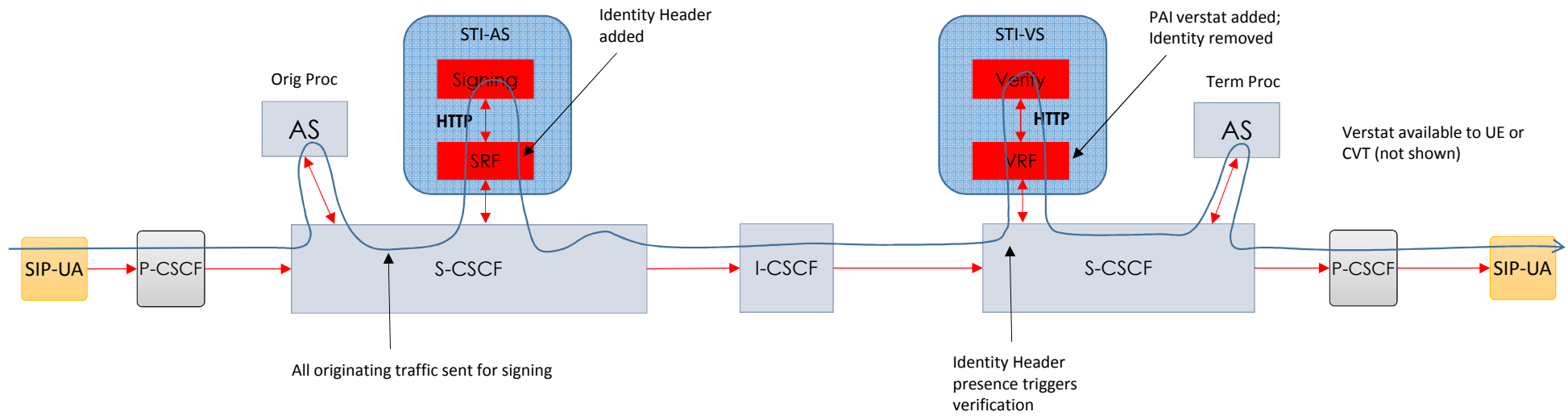


Intra-Network Flow (orig SHAKEN arch)

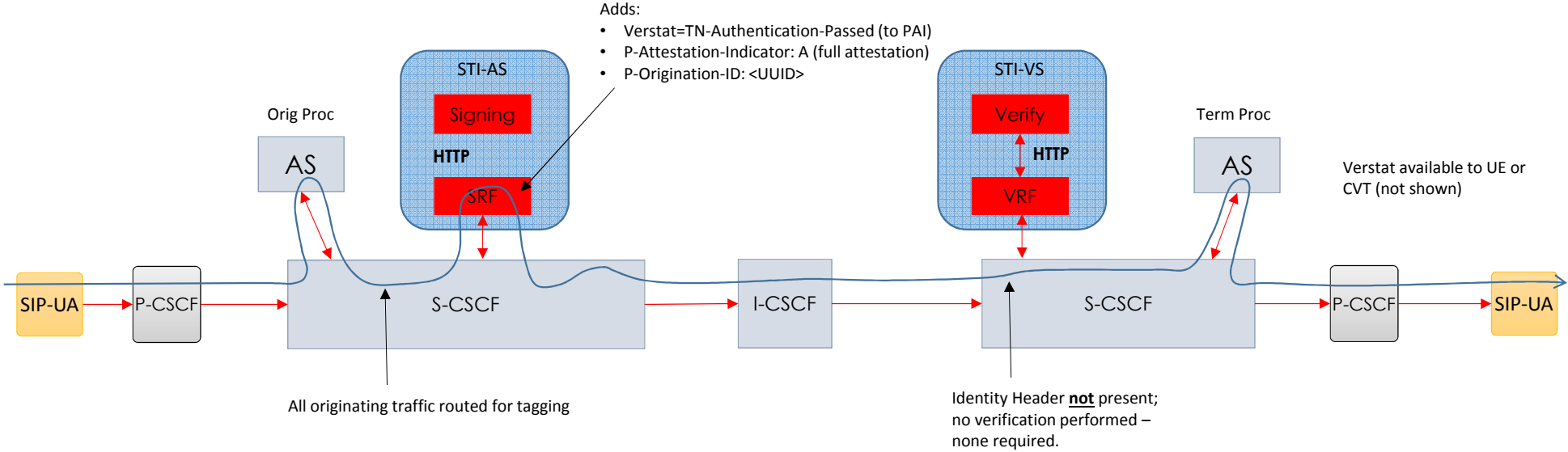


KEY POINTS:

- All originated calls are signed
- If call is Intra-network, the call is signed then immediately verified
 - Signing/verification is unnecessary
- Signing is only required when handing off call to another network (trust domain)



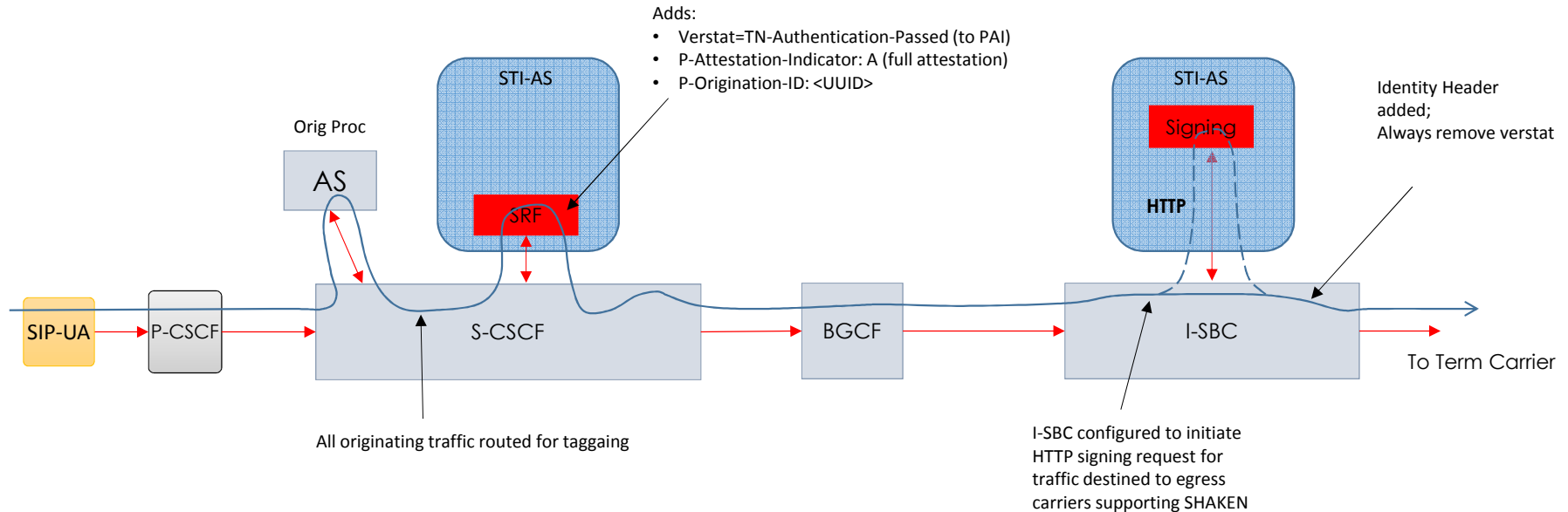
Intra-Network Flow (new arch)



- KEY POINTS:**
- Eliminates unnecessary signing and corresponding verification for intra-network calls
 - All VoLTE/CVoIP originated calls have verstat and new P-Headers added, but are not automatically signed.
 - Verstat=TN-Authentication-Passed can be added at this point because the PAI is known to be good
 - Verstat is passed to UE or CVT logic (not shown)
 - New P-headers are used when calls egress to another network



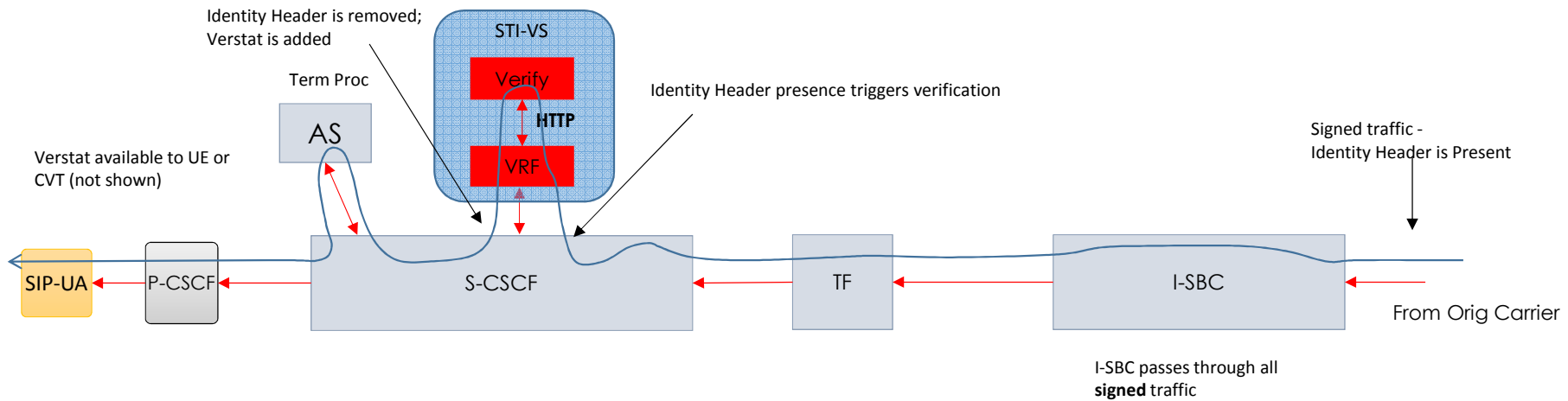
Inter-Network Flow (new arch) - origination



- KEY POINTS:**
- Signing (adding Identity header) only performed on egress to another carrier (trust domain)
 - I-SBC enabled to perform signing request using HTTP Restful API
 - Signing is initiated based on reception of new P-headers and trigger on egress logical TG
 - I-SBC always removes verstat (regardless of whether call is signed)



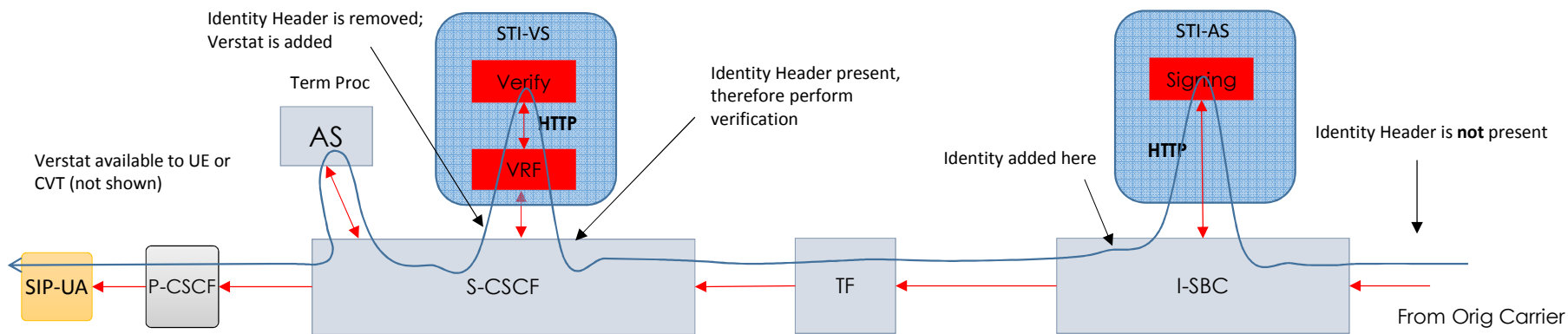
Inter-Network Flow – Signed Termination (no change)



- KEY POINTS:
- Terminating inter-network flow not changed by proposed new architecture
 - Verification of signed traffic triggered by presence of Identity header



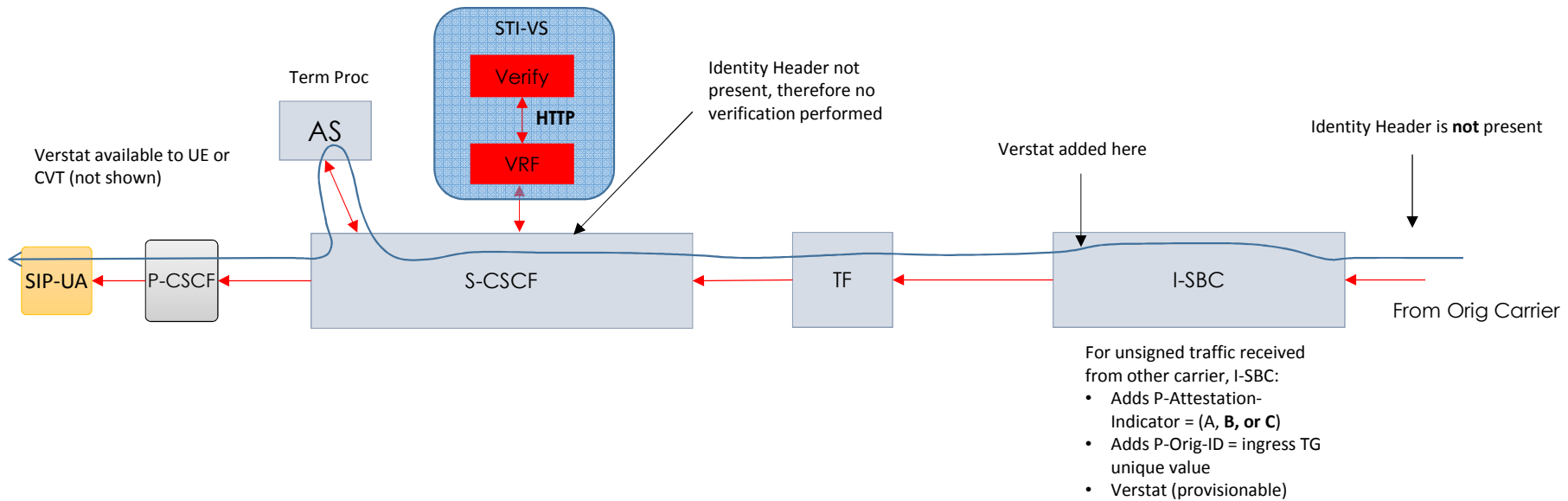
Inter-Network Flow – Unsigned Termination (orig flow)



- KEY POINTS:
- Original plan was to sign all unsigned traffic received from other carriers
 - Plan was to partially attest this traffic
 - Primary reason to sign was for traceback
 - Signed traffic would have been immediately verified



Inter-Network Flow – Unsigned Termination (new flow)



KEY POINTS:

- Unsigned traffic received from untrusted carrier is **not signed** by term network
- I-SBC does add:
 - verstat (value is provisionable on ingress logical TG basis), to be used by terminating UE and/or CVT
 - New P-headers, in the event call is redirected out of the network and would then require signing

