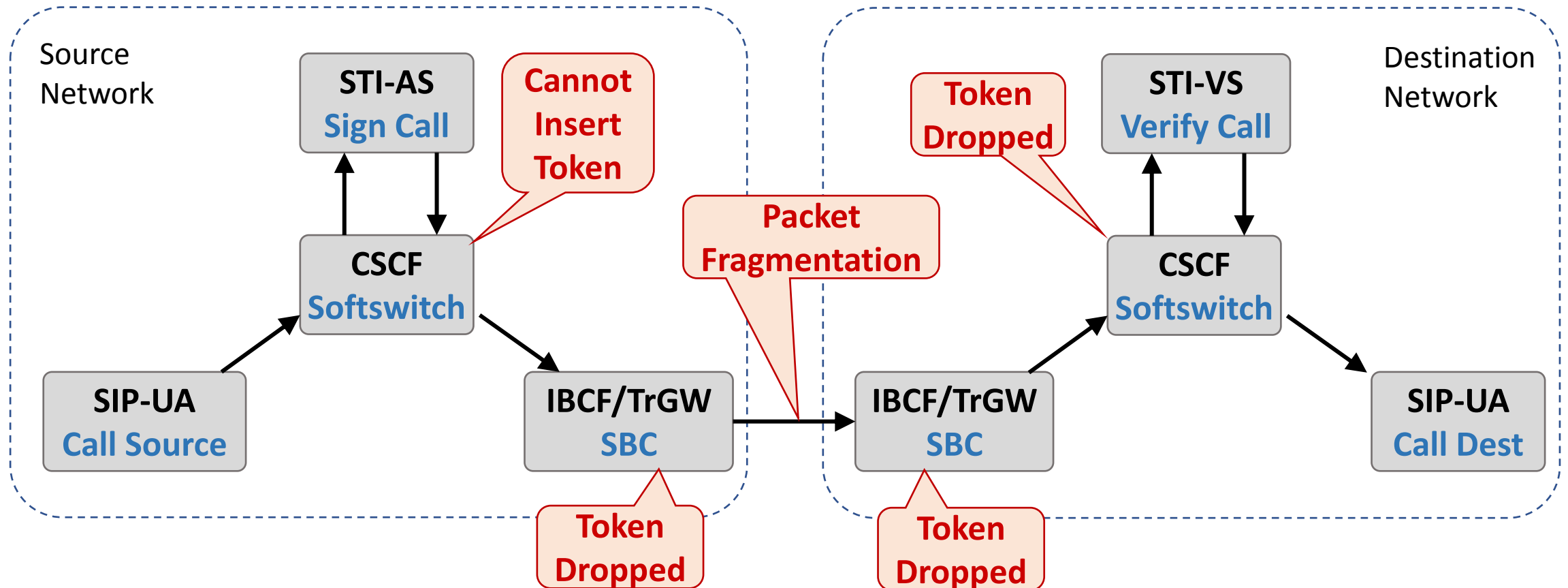


Experiences of STIR/SHAKEN Early Adopters

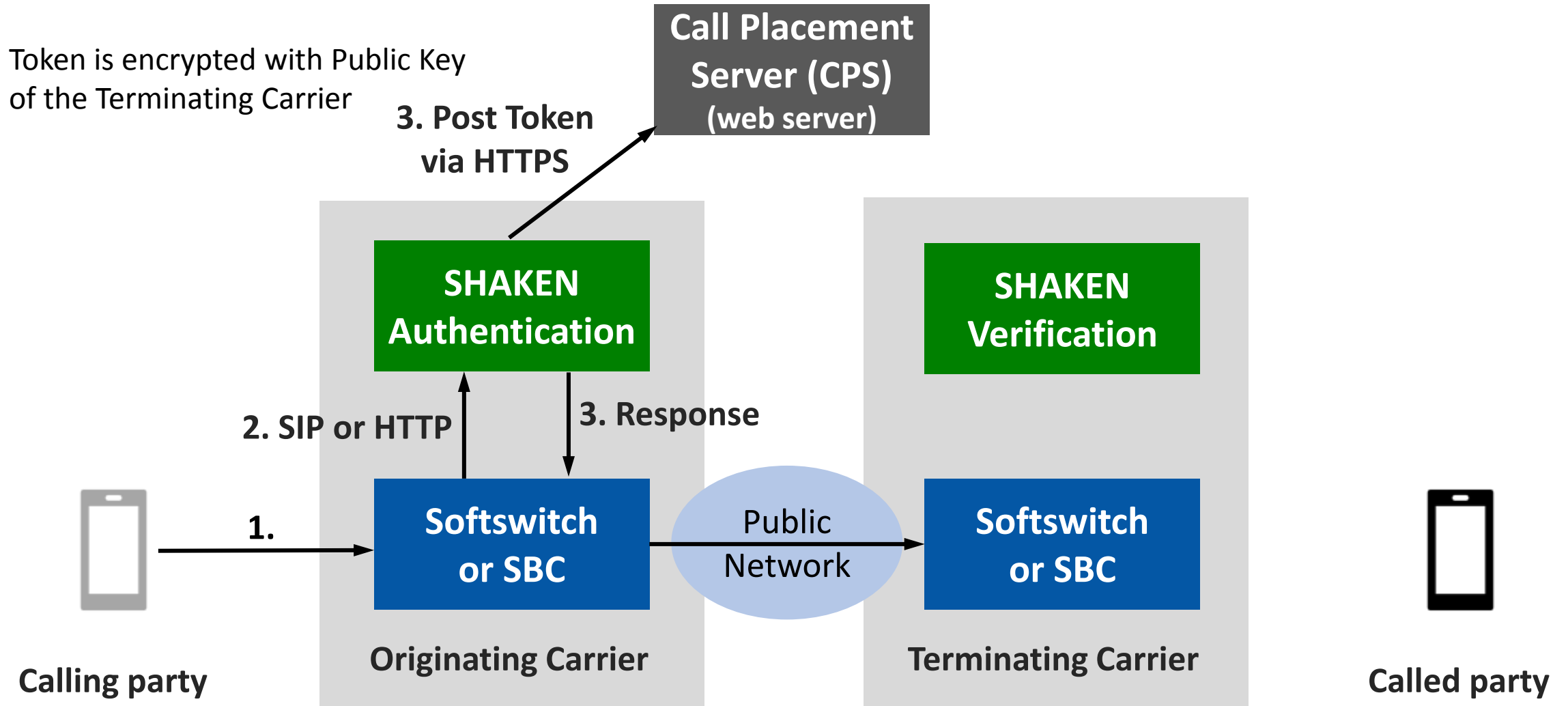
SIPNOC 2019

Jim Dalton - TransNexus

SHAKEN Architecture (ATIS-1000074)



SHAKEN with Out-of-Band STIR



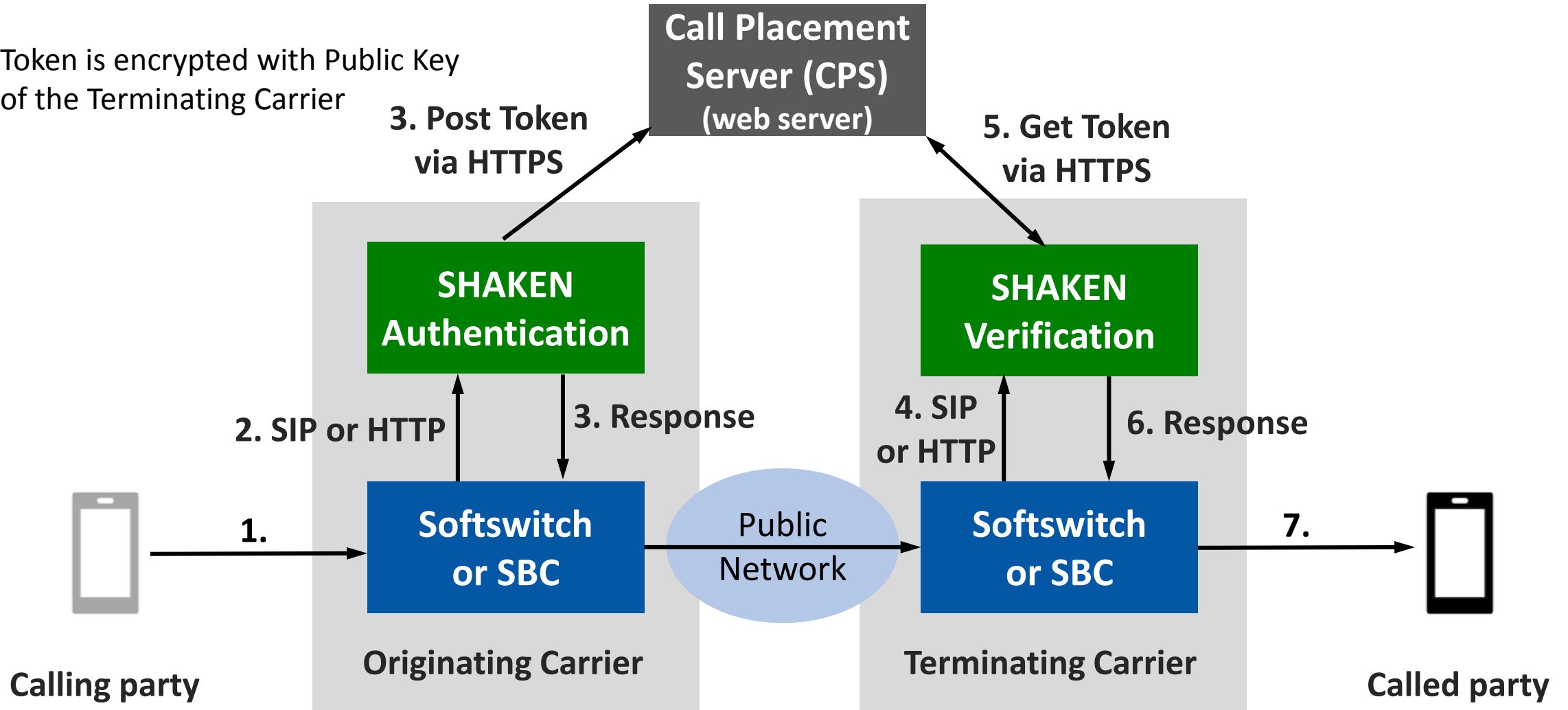
OOB-STIR Token Post

```
POST /transnexus/cps/14043457000/ppts HTTP/1.1
Content-Type: application/passport
Content-Length: 684
Host: transnexus-cps.com
Connection: Keep-Alive
User-Agent: Apache-HttpClient/4.5.2 (Java/1.8.0_211)
Accept-Encoding: gzip,deflate
```

```
YQKOjF0PDp+A3BTfh9kYH973uFft0i5645omakmqzPYrnN1CPeaAKeEO1WFazzqDoAfiC67hSZK9Qba
lAOQXmWKHRthbeMAC8N3UJOpzrK6HCJw66/ubeuzFKwn0nZEwF3rSk16Z2bVeKvZYhuvBx7gz2wSCwu
VQPh9yABOLo1W1xzBom5jbdutarsjEJGHgkFnUv9aUgG/J4HGYIYJv6PIsTJSQ3mMsGpmNOhKNegbR2
jR2qBGOydsQpEN1jftIy0OschvB/lPD2R0Nx1NofPr7kGEBEeTpmE977QZs81lSEerCT0LdpEs1UmqV
Mi4eC5IgXYbKiLXTKEDs4Er1O130RTPe6bUoDbukXBDG1z0LUm45oXrpiZw3Q+ZxXgdC2qLBujWoyFW
QaV4oheZ7C+WLNvrQW+CHvpuszyVhKWJW8Wv+f8OrE6zdXQkIf4deBrRYK8K5SLZXJZAW+73dT suaom
SuIia2pL5WWmQLyOrxikrdPyubBKLy3dCdmFnN6c4vq1wEfeUfZNYXLhZmBMRMH7KbtUMXqnvWQdocU
00suavM3SWdB3wonk25OUgxESgEAapPPDM0ufeFrkBvDfk7IQGqtnEL7XIh3t5Z1jGWtanHdN16AIM9
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```

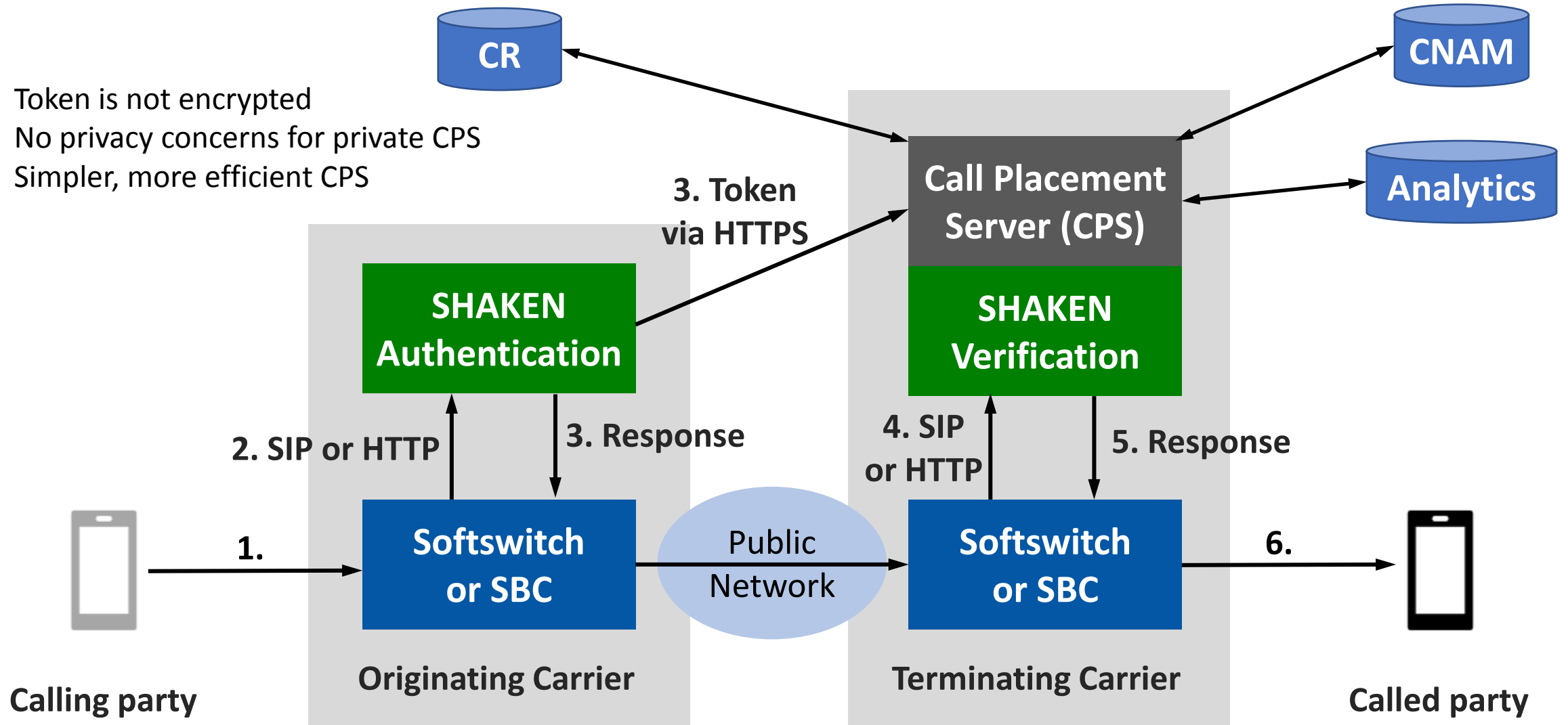
SHAKEN with Out-of-Band STIR

Token is encrypted with Public Key
of the Terminating Carrier

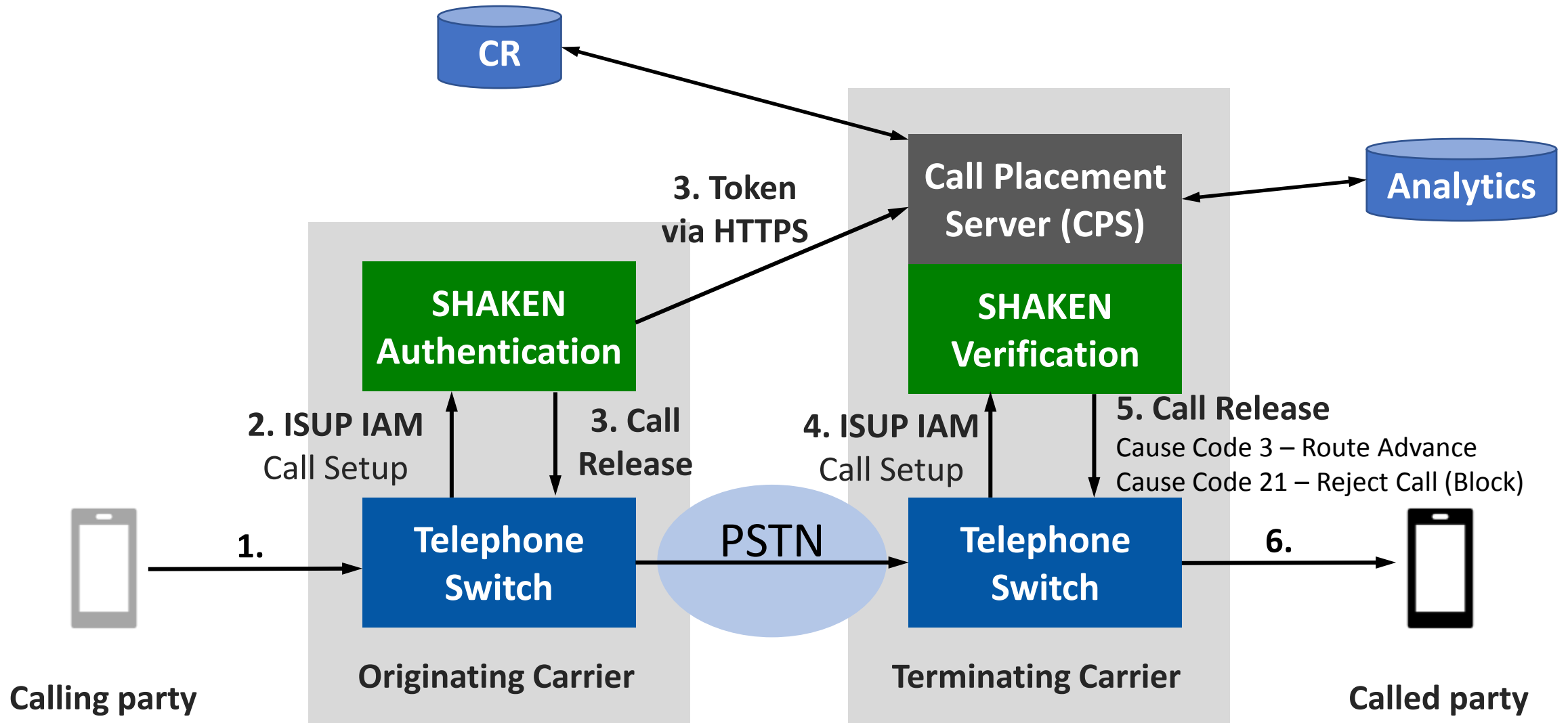


Out-of-Band STIR Simplified

Token is not encrypted
 No privacy concerns for private CPS
 Simpler, more efficient CPS



Out-of-Band STIR for TDM



The OOB-STIR Gotcha - CPS Discovery

- Where does the Source Network Post the OOB-STIR token?
 - Shared central CPS
 - CPS per destination network
- Discover CPS by Called Number or OCN?
- Possibilities
 - CPS list is published by the STI-PA
 - CPS address added to the LERG
 - CPS address added to NPAC SIP URI field
 - Other new ideas?