

# ATIS Robocalling Testbed Overview

May 30, 2017



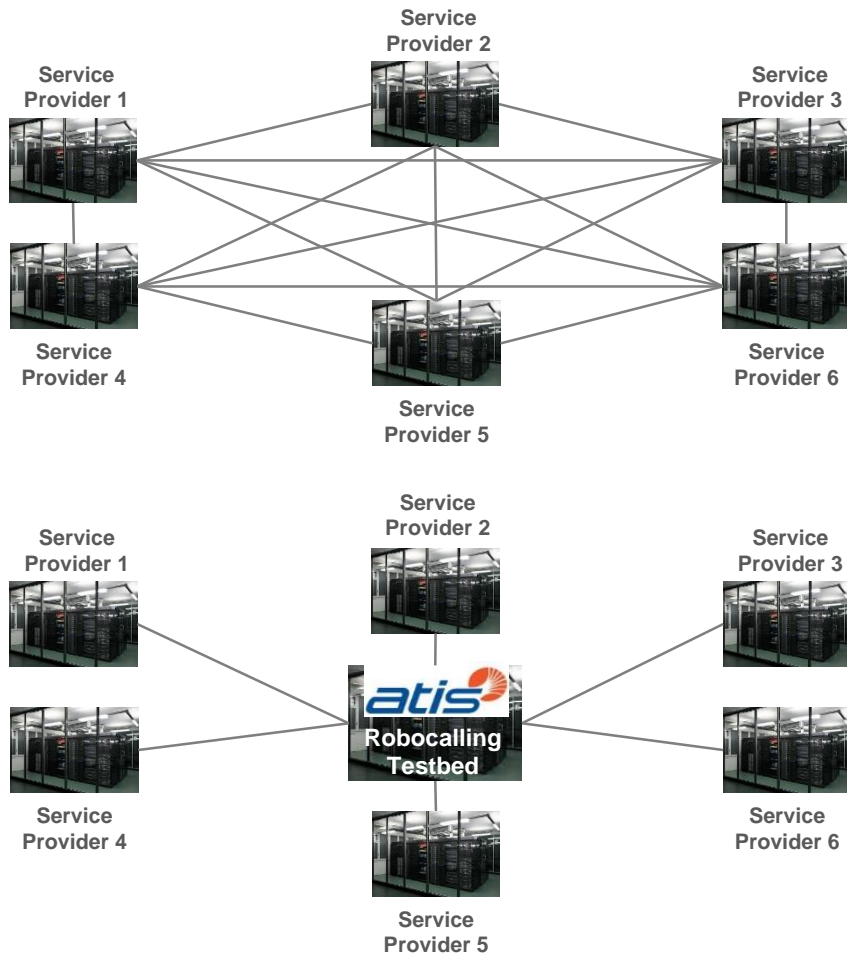
# AGENDA

- What is the ATIS Robocalling Testbed?
- Why participate in the Testbed?
- How do you participate?

# WHAT IS THE ATIS ROBOCALLING TESTBED?

- Established in response to ATIS task from Robocall Strike Force Report (10/26/2016) and as an outgrowth of work underway at the ATIS Testbeds Focus Group
- Virtualized industry test platform to help service providers, suppliers and third parties verify implementations of new ATIS SHAKEN framework
- Support testing per applicable ATIS Testbeds Focus Group document(s), currently “Secure Telephone Identity (STI) Protocol Test Plan” (TLT-2017-00003) and Authentication and Verification Services
- Provide non-preferential participant access
- Open to both ATIS members and qualified non-ATIS members
- Support scheduled testing 9:00 AM – 5:00 PM Eastern Time, Monday through Friday
- Testbed operated by Neustar:
  - ❑ Physical lab environment to support remote testing
  - ❑ Lab support resources
  - ❑ Applicable documentation to support testing
  - ❑ Dedicated e-mail for Technical Support requests

# WHY PARTICIPATE IN THE ATIS ROBOCALLING TESTBED?



## Key Benefits:

- Test against ATIS-developed test plan(s) to achieve interoperability
- Save time when establishing testing with other participant(s) through uniform set of access, connectivity and configuration profiles
- Enable direct and efficient collaboration to share/discuss/resolve issues identified during testing
- No cost testbed solution for ATIS and qualified non-ATIS members through 2017

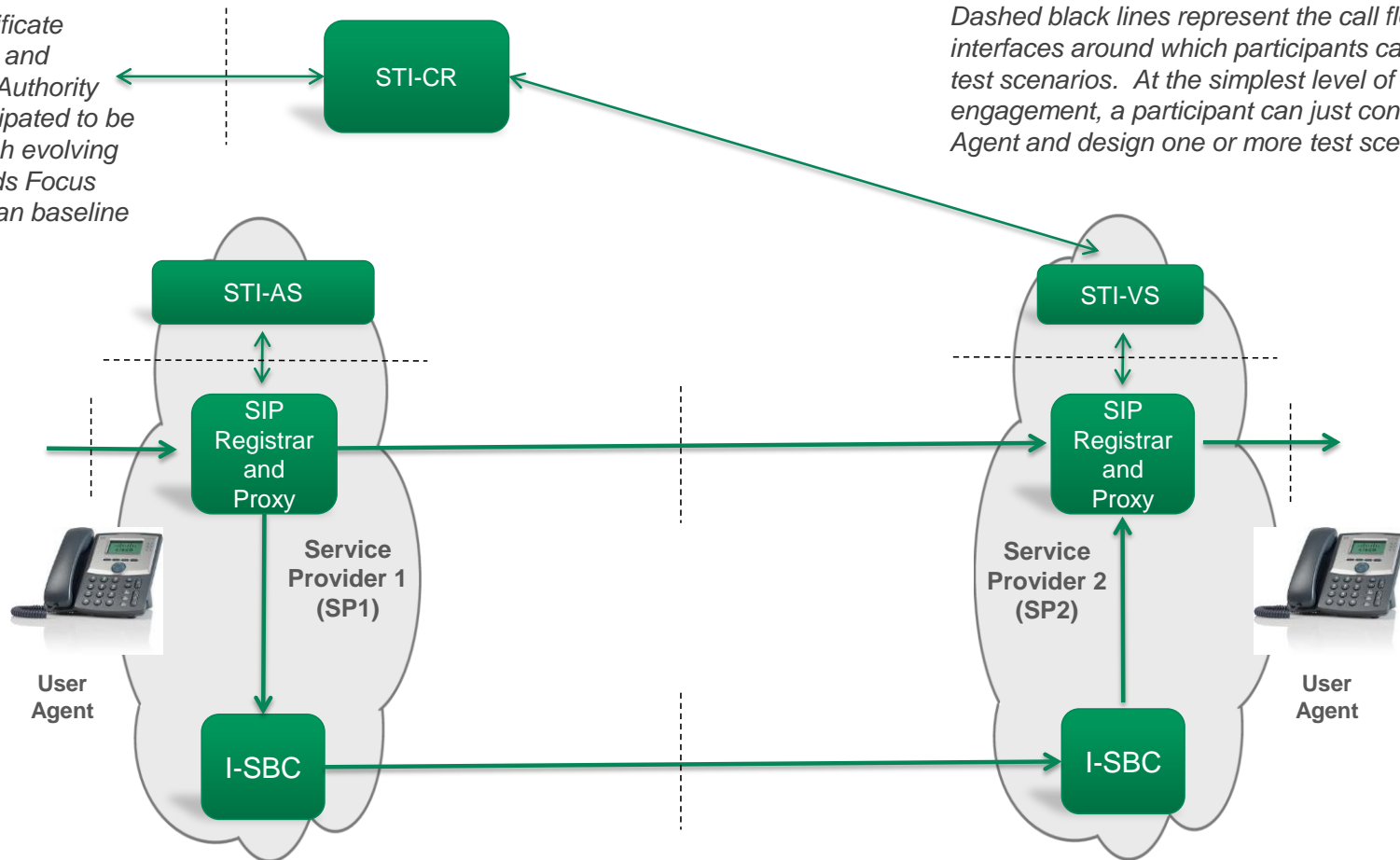
# HOW TO PARTICIPATE IN THE ATIS ROBOCALLING TESTBED?

- Engage on-line at: <https://www.neustar.biz/atis-testbed/index.php>
- Review, sign and return following two prerequisite documents:
  - ❑ ATIS Confidentiality Agreement
  - ❑ Neustar Robocalling Testbed Use Policy
- Request and review “ATIS Robocalling Testbed Connectivity Guidelines”
  - ❑ Illustrates representative test scenarios
  - ❑ Identifies technical information that a participant needs to provide for testbed access
  - ❑ Provides technical information that a participant needs to configure and test
  - ❑ Provides information on how an ATIS member “observes” testing
- Engage through Technical Support link ([robocall-testbed-support@neustar.biz](mailto:robocall-testbed-support@neustar.biz))

# ATIS ROBOCALLING TESTBED SNAPSHOT

Broader Certificate Management and Governance Authority aspects anticipated to be added through evolving ATIS Testbeds Focus Group test plan baseline document(s)

Dashed black lines represent the call flow interfaces around which participants can design test scenarios. At the simplest level of engagement, a participant can just connect a User Agent and design one or more test scenarios.

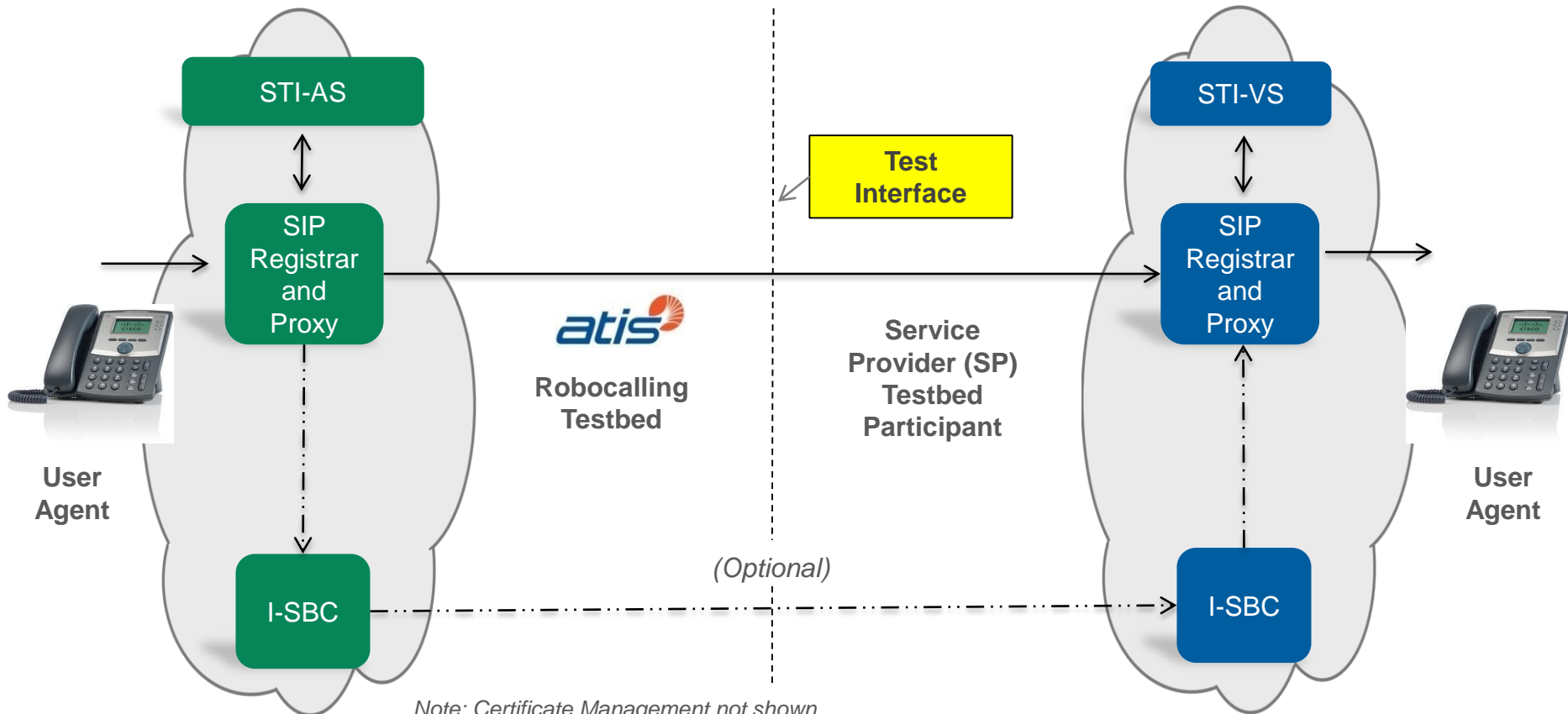


# CURRENT ATIS ROBOCALLING TESTBED CAPABILITIES

- **Caller Authentication and Verification**
  - Authentication Service (STI-AS) instance per evolving draft standards
  - Verification Service (STI-VS) instance per evolving draft standards
  - Both accessed via documented REST APIs
- **Certificate Authority**
  - EJBCA instance (e.g., signing and storing certificates from Certificate Signing Requests)
  - Integrated with STI-AS instance above and supports any STI-VS as a public certificate repository (STI-CR)
- **Access and Network infrastructure**
  - Phones
  - Asterisk and FreeSWITCH PBXs (SIP Proxies)
  - Oracle/Acme SBCs (simulating inter-carrier connectivity)
  - Access Firewall (public Internet, whitelisting IPs)

# TEST SCENARIO #1

## TESTBED SIMULATING SP AND ORIGINATING CALLS WITH STI-AS

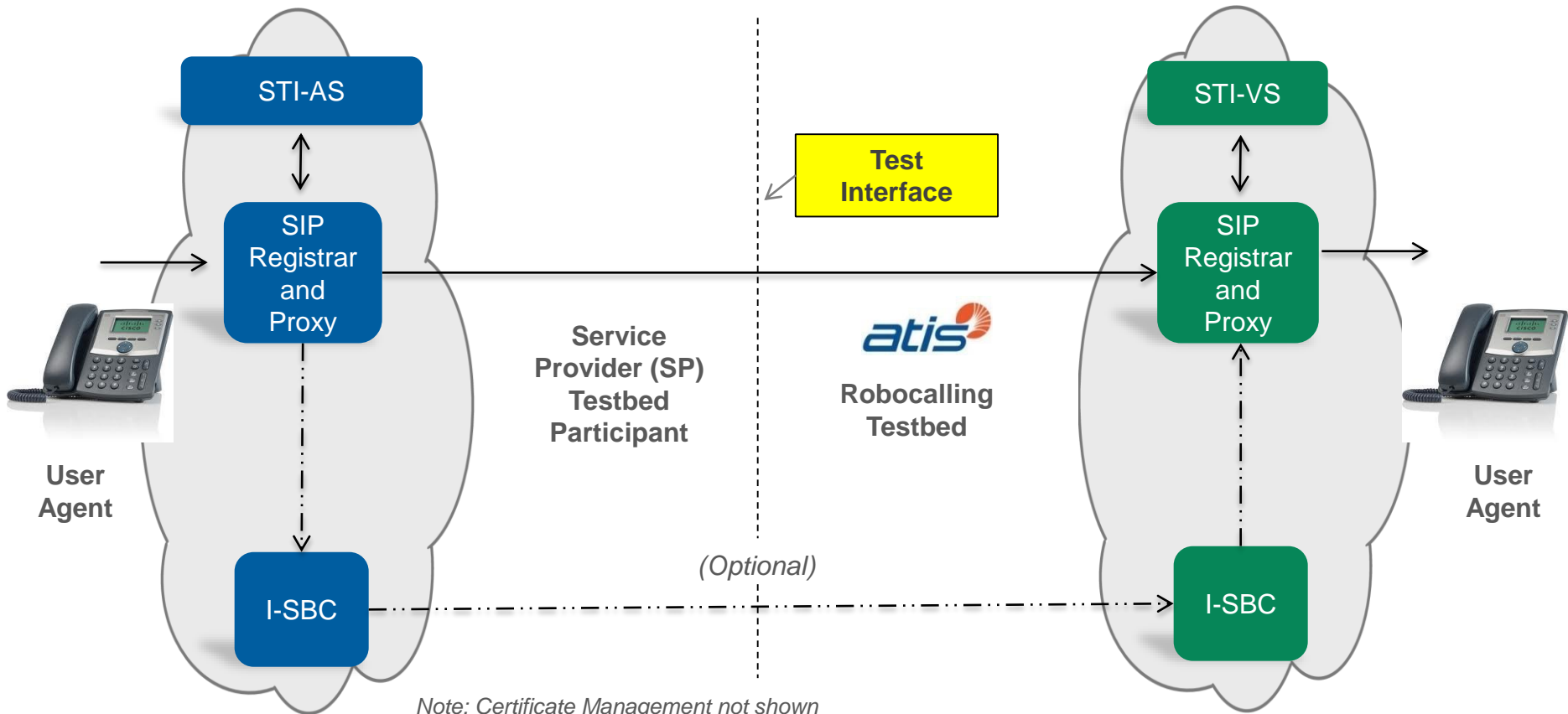


Note: Certificate Management not shown



# TEST SCENARIO #2

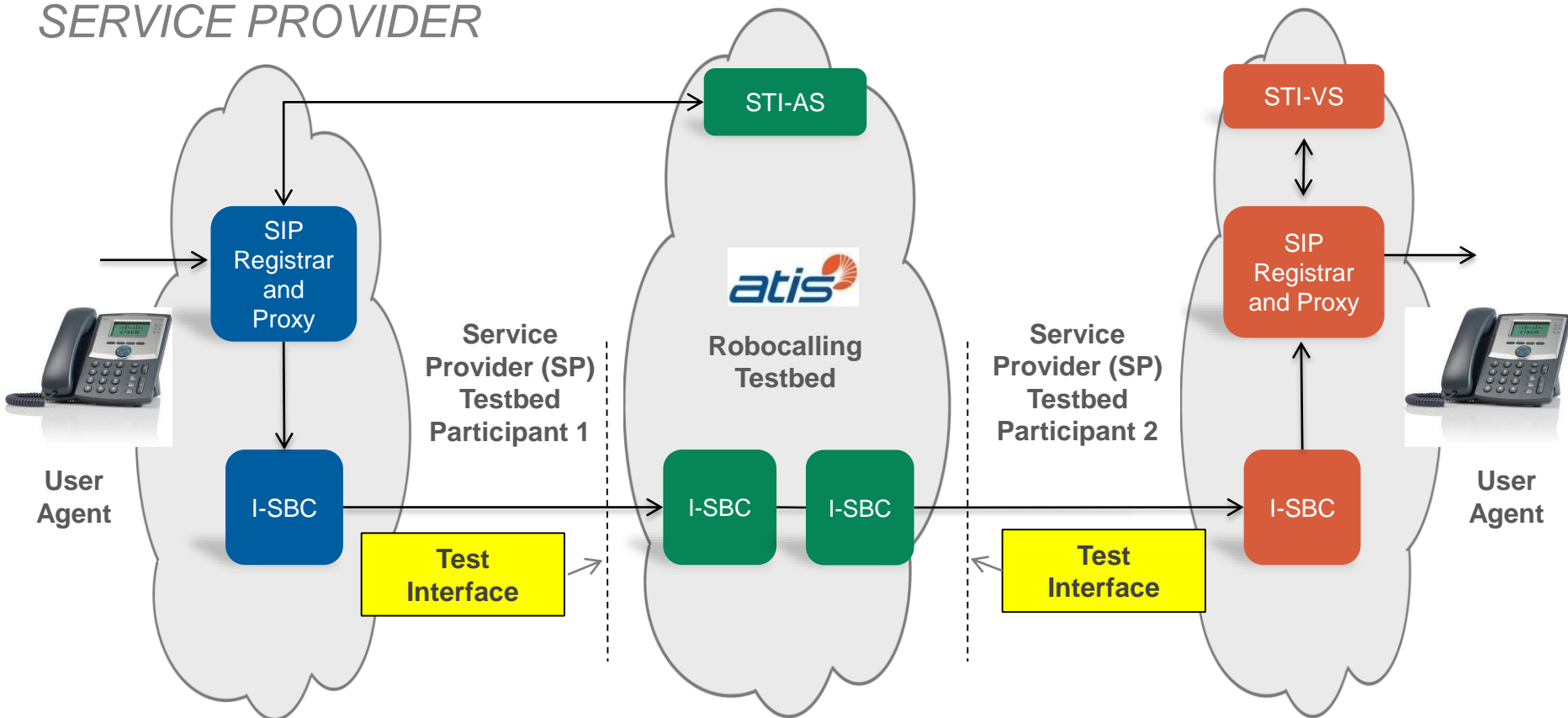
## TESTBED SIMULATING SP AND TERMINATING CALLS WITH STI-VS



Note: Certificate Management not shown

# TEST SCENARIO #3

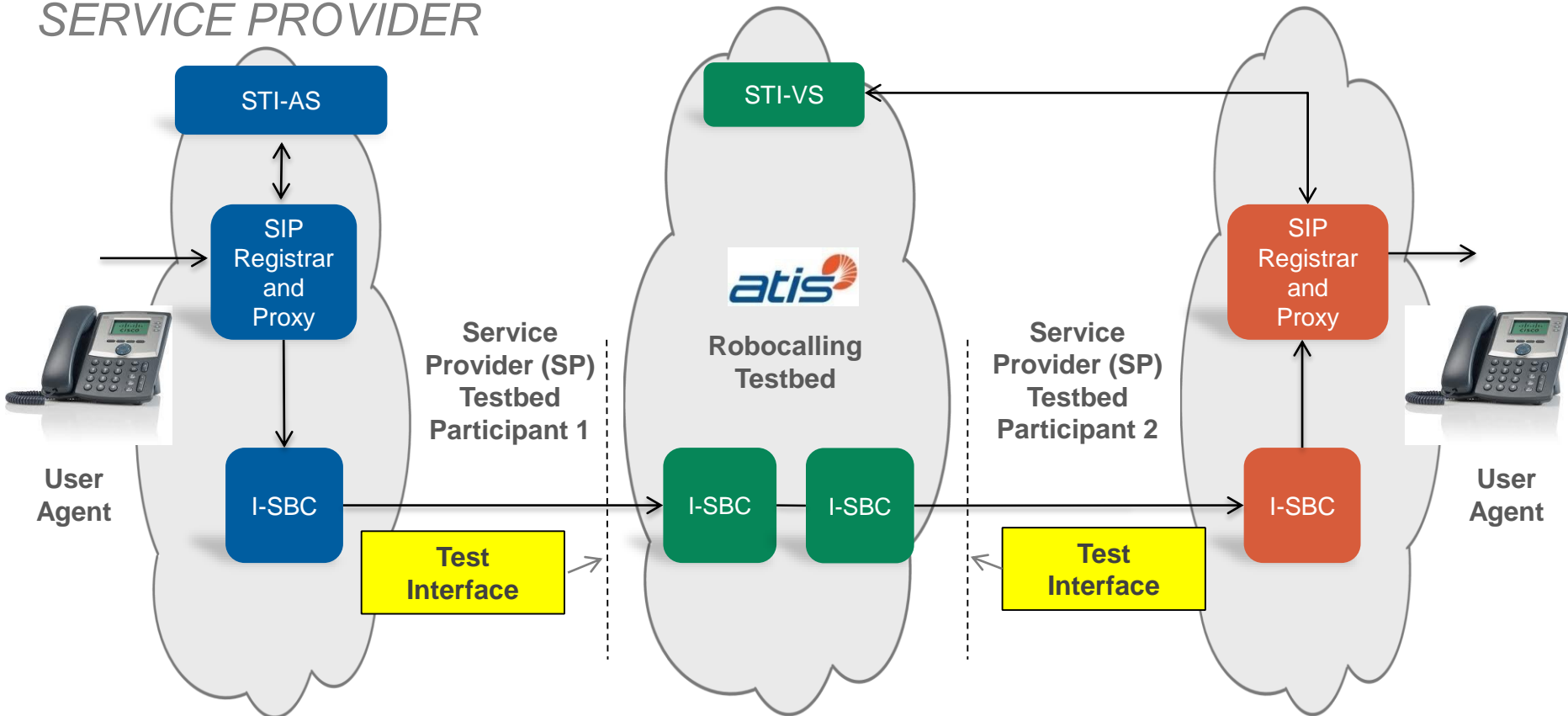
## TESTBED PERFORMING STI-AS AND SIMULATING A TRANSIT SERVICE PROVIDER



Note: Certificate Management not shown

# TEST SCENARIO #4

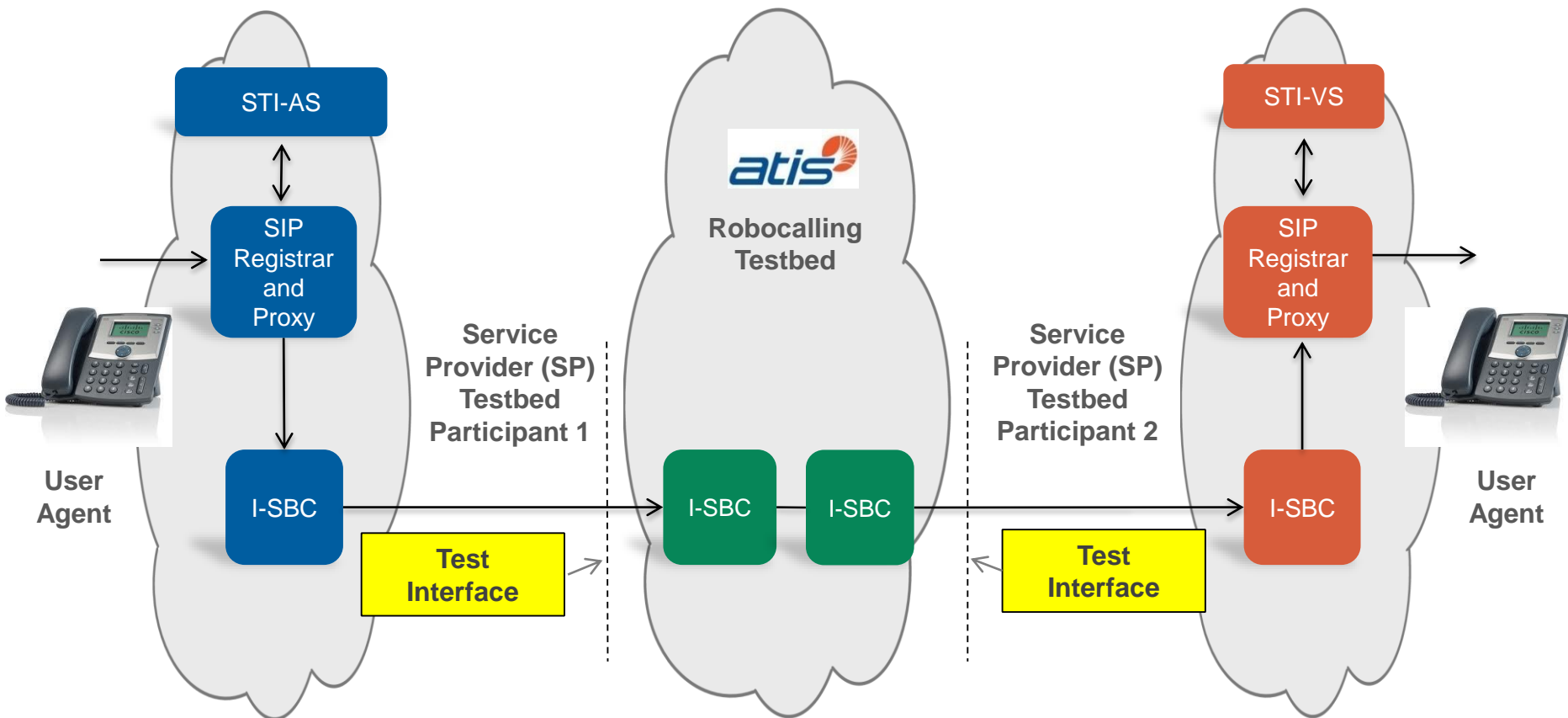
## TESTBED PERFORMING STI-VS AND SIMULATING A TRANSIT SERVICE PROVIDER



Note: Certificate Management not shown

# TEST SCENARIO #5

## TESTBED SIMULATING A TRANSIT SERVICE PROVIDER



Note: Certificate Management not shown

# TEST RESULTS

- All test results protected under the ATIS Testbeds Focus Group NDA
- Anonymized and aggregated results will be published by ATIS
- Participants can test implementations through the ATIS Robocalling Testbed to ensure interoperability and facilitate preparation of aggregate test results
- Bilateral testing outside of ATIS Robocalling Testbed is also possible and will be included in the overall results (assuming it is conducted under the Testbeds Focus Group NDA and in accordance with Testbeds Focus Group test plans)

# SUMMARY

- ATIS Robocalling Testbed launched as outgrowth of work underway at the ATIS Testbeds Focus Group and Robocall Strike Force to promote SHAKEN framework industry testing and broad adoption
- Neustar partnered with ATIS to operate Testbed in support of ATIS and non-ATIS member participants
- Requesting and encouraging your support and participation
- For further questions, please contact Jim McEachern