Registry for Country-Specific Secure Telephone Identity (STIR) Trust Anchors

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Ah Hah! Moment

• Concerns expressed at 101 that IANA would need to be an arbiter of who gets to put records in registry

• Realization: *It does not matter!*  
  • In U.S. and Canada, regulators setup incentives for knowing if a registrant is OK

• For example:
  • Entry for +1-202 will be there by iconectiv
  • Entry for +1-202 by evil organized crime boss
  • *IANA Does Not Arbitrate. Yes, it will allow the evil registration.*
How does it work?

• In real life, illegal robocall mitigation is all about reputation and statistics
  • We know there will be calls that have no attestation that are just fine (e.g., tiny carrier in the middle of nowhere that’s got a DMS-10)
  • We know there will be call that will have the highest levels of attestation that are illegal robocalls (e.g., illegal campaign that buys numbers in bulk with a credit card)

• STIR increases the confidence in the identifying the caller, which can be used to allow, warn, or block the call
Will IANA really allow an illegal registration?

• Not exactly.

• What IANA won’t do:
  • Figure out who is the responsible organization, including delegation, for making or updating a registration

• What IANA will do:
  • Eat our own dog food
  • The registration has to have valid cryptographic identity (e.g., S/MIME with a trusted chain, DKIM for an inbound by email, etc.)
    • No valid identity, no registration
  • IANA notes the identity in the registry
    • These entities are either governments or delegated by governments – no privacy issues
    • The users of the registry use the reputation of the registrant in the choice of believing the authenticity of the certificate
Open Issues

• Working with IANA to figure out what to call this kind of registration
  • Current draft says “First Come First Served”
  • Not really FCFS, because there can be multiple entries
  • Perhaps a degenerate case of “expert review”
  • [Note – this is for IANA to work out]

• One request was to have IANA remove expired certificates
  • IANA not quite sure how that would be operationalized
  • OK to leave it up to the registry user?
    • E.g., “Users MUST check the validity of the retrieved certificate.”

• Other Issues?

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