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?