## **TSS Signing Lifecycle**

Once a group is created and becomes active,

## D and E nonces

In the signing process, each member is required to have their nonces (D and E values). MsgSubmitDEs is the message for a member to send their public nonce to the chain. So, the chain can assign their nonce in the signing process.

```
message
DE
{ bytes pub_d =
[ ( gogoproto . casttype )
"github.com/bandprotocol/chain/v2/pkg/tss.Point"]; bytes pub_e =
2
[ ( gogoproto . casttype )
"github.com/bandprotocol/chain/v2/pkg/tss.Point"];}
message
MsgSubmitDEs
{ option
(cosmos.msg.v1.signer)
"address"; option
(amino.name)
"tss/MsgSubmitDEs";
repeated
DE des =
[ ( gogoproto . customname )
"DEs",
(gogoproto . nullable)
false ]; string address =
2
[ ( cosmos_proto . scalar )
```

"cosmos.AddressString"];}Previous BandChain TSS Group Next Requesting a TSS Signature