draft-ietf-sidrops-signed-tal-03

(not in last call)

Goals

- Allow RPKI Trust Anchor Key Rolls
- Learn from DNSSEC (RFC 5011)
- Soft landing into existing standards
- Leave a trail for outdated clients

Comment on -02

When is it safe to drop the old key?

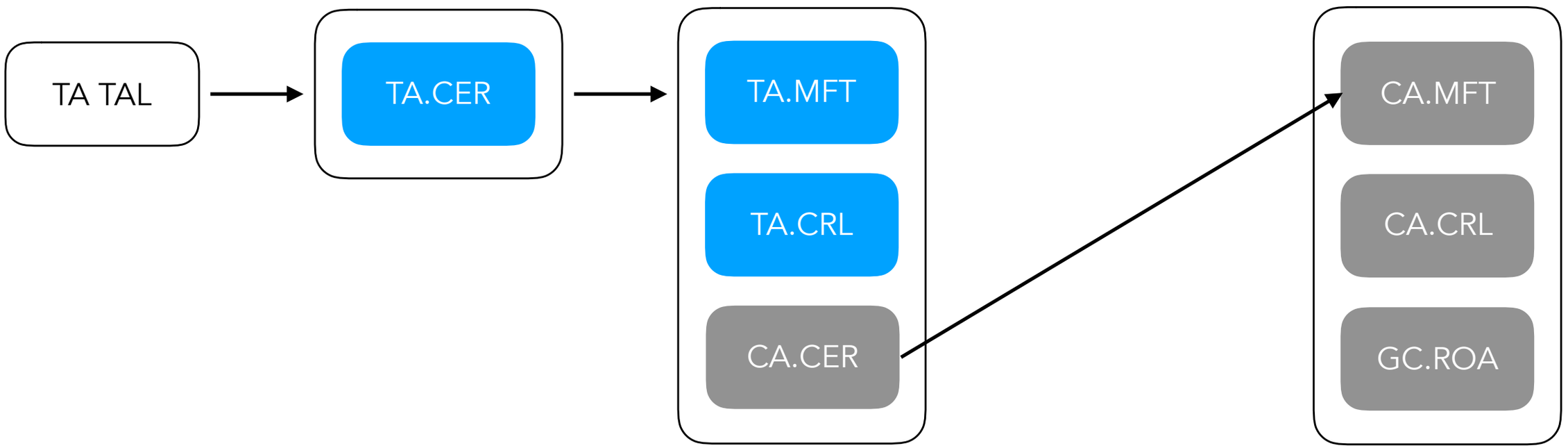
Changes in -03

- Clarified phases.. I hope!
- Use distinct URIs for TA certificates in TAKs for each phase!

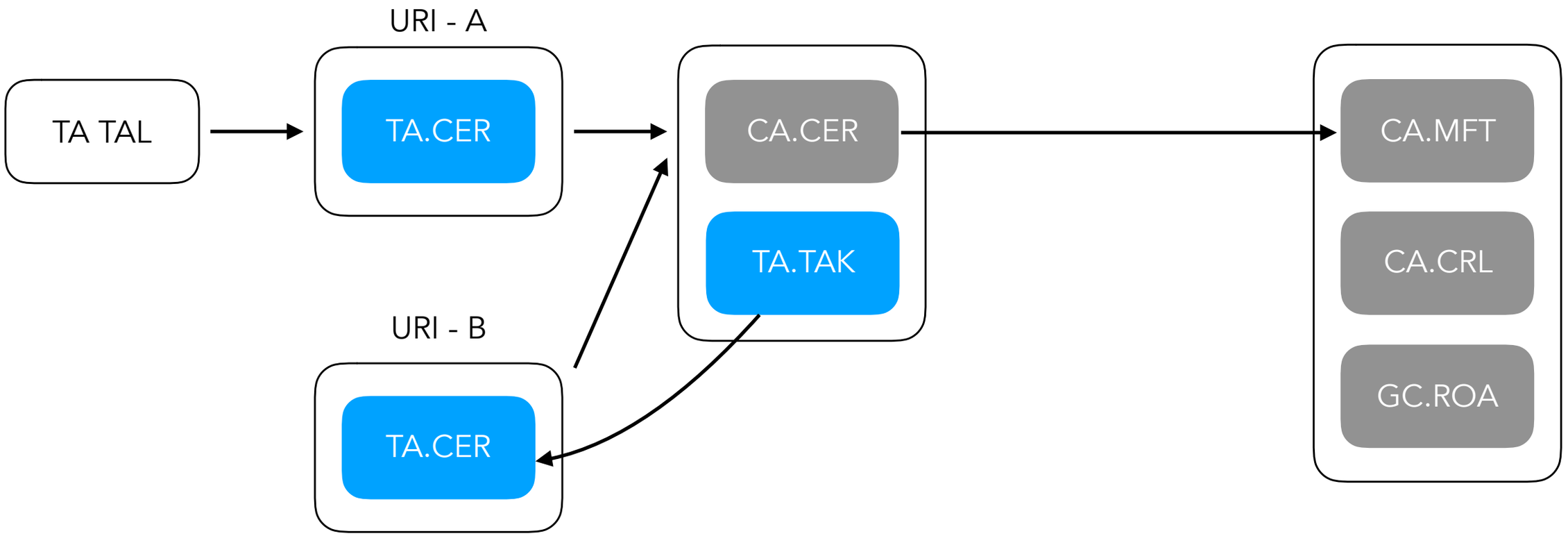
TAK Objects

```
TAK ::= SEQUENCE {
   version   INTEGER DEFAULT 0,
   current   ::= SEQUENCE SIZE (1..MAX) OF CurrentKey,
   revoked   ::= SEQUENCE OF SubjectPublicKeyInfo
}

CurrentKey ::= SEQUENCE {
   certificateURIs       SEQUENCE SIZE (1..MAX) OF CertificateURI,
   subjectPublicKeyInfo  SubjectPublicKeyInfo
}

CertificateURI ::= IA5String

SubjectPublicKeyInfo ::= SEQUENCE {
   algorithm            AlgorithmIdentifier,
   subjectPublicKey     BIT STRING
}
```

Phase 0: Current situation

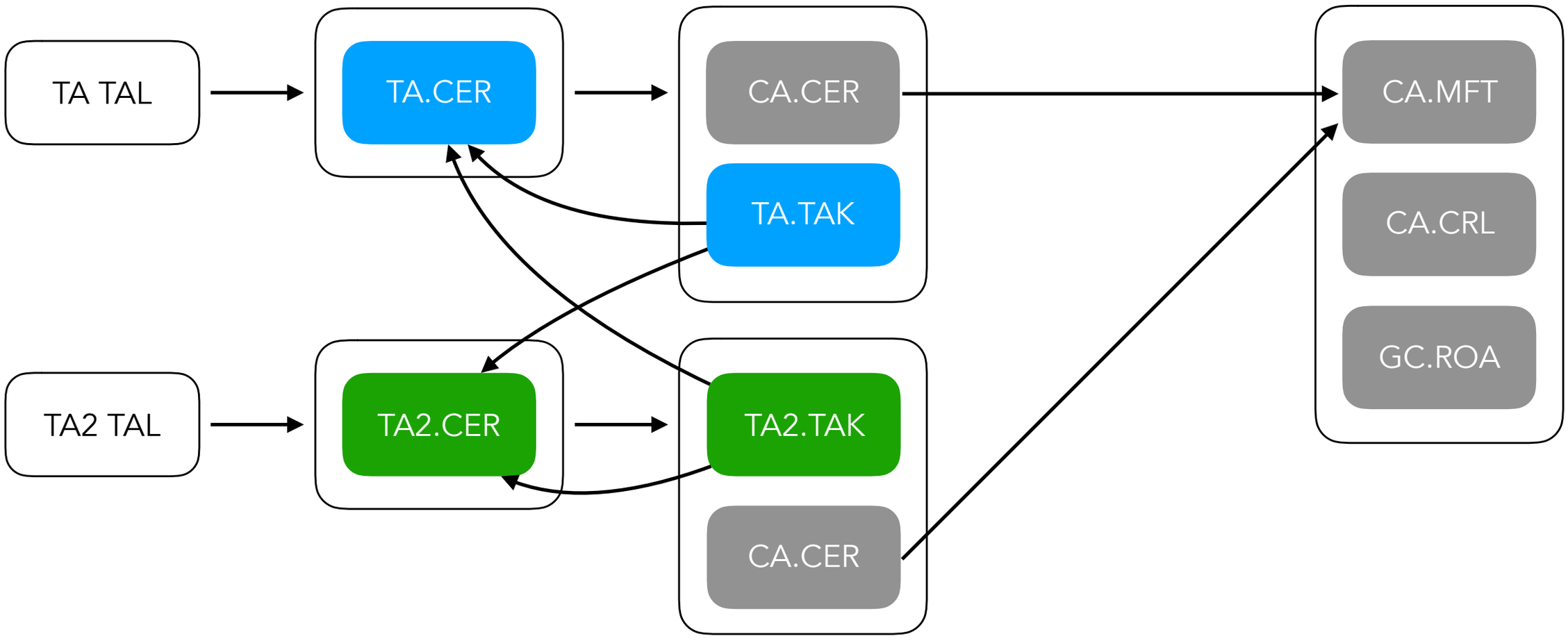


Phase 1: Add a TAK



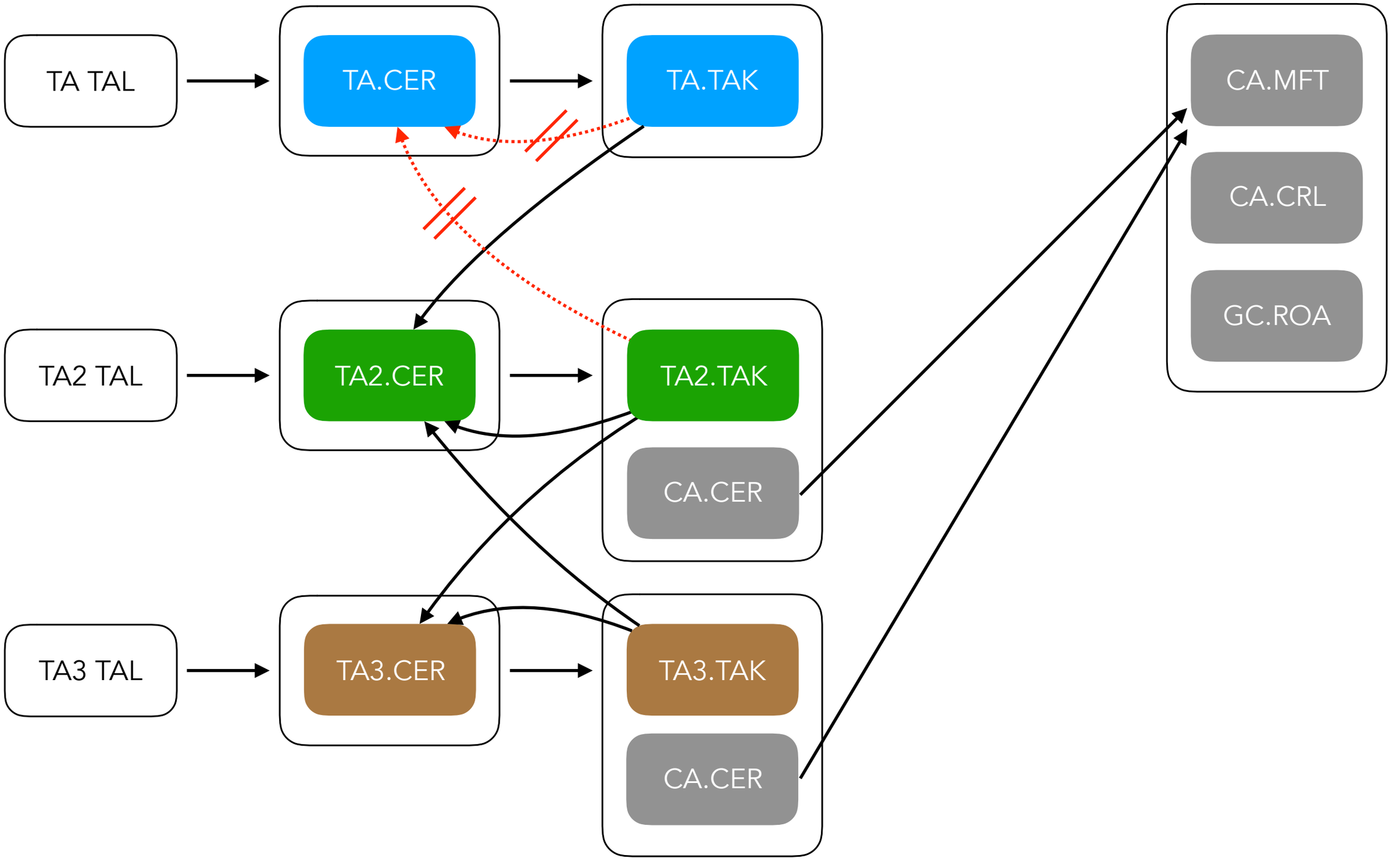
- RPs which support TAK MUST use URIs in TAK
- TA operator can monitor which proportion of RPs support

Phase 2: Add key 'B'



➡ Ship TA2 TAL with RPs, or even.. ship TA2.TAK?

Phase 3: Roll to TA 3



Next?

Concerns?

Photo by Mikhail Vasilyev on Unsplash