# Notes from Paul:

The MI must reflect the strict hierarchy of service-provider / operator / consumer resources. It must require the use of credentials (including a changeable secret password) for all service-provider operations. I don’t think credentials are required for the operator call to register a consumer. The operator cannot alter or retrieve any data by this means so a secret password is probably overkill. For device association however we might have to re-think, especially re-usable devices – see later

I think we already discussed this but I would recommend using identifiers from IDA to identify service-providers, and operators as well as consumers

For the SDK, the only method required is the one to register a new consumer.

## Suggested methods that only a service-provider can call:

POST /service-provider/operator(id) – to create a new operator and permit that operator to register consumers

GET /service-provider/operators – to retrieve list of operators

PATCH /service-provider/operator(id1,id2) – disable an operator by giving it a new ID. This is to allow exsiting operators to be disabled without losing any of their data or altering the hierarchy.

GET /operator/consumers(id) – to retrieve list of consumers for an operator for that service-provider

## Consumer registration method that only an operator can call:

POST / operator/consumer(opid,cid,segment) – to create a new consumer with a coelitionID and segment data and associate it with the operator.

## Device registration methods that only an operator can call (suggested)

I think these operations should be protected by a secret password for the operator

POST / operator/device(opid,did) – to notify the DE of one or more device IDs that will be used by the operator.

PATCH /operator/permanent-device(opid,did,cid) – to associate a device with a consumer 1-1 for all time

PATCH /operator/temporary-device(opid,did,cid,time-period) – to associate a device with a consumer for a time period (e.g. a wristband). Atoms received outside this time period are ignored / quarantined

PATCH /operator/shared-device(opid,did,cid) – to associate a device with a consumer, in addition to other consumers it is already associated with.