Discovery of Service consumption by STAs
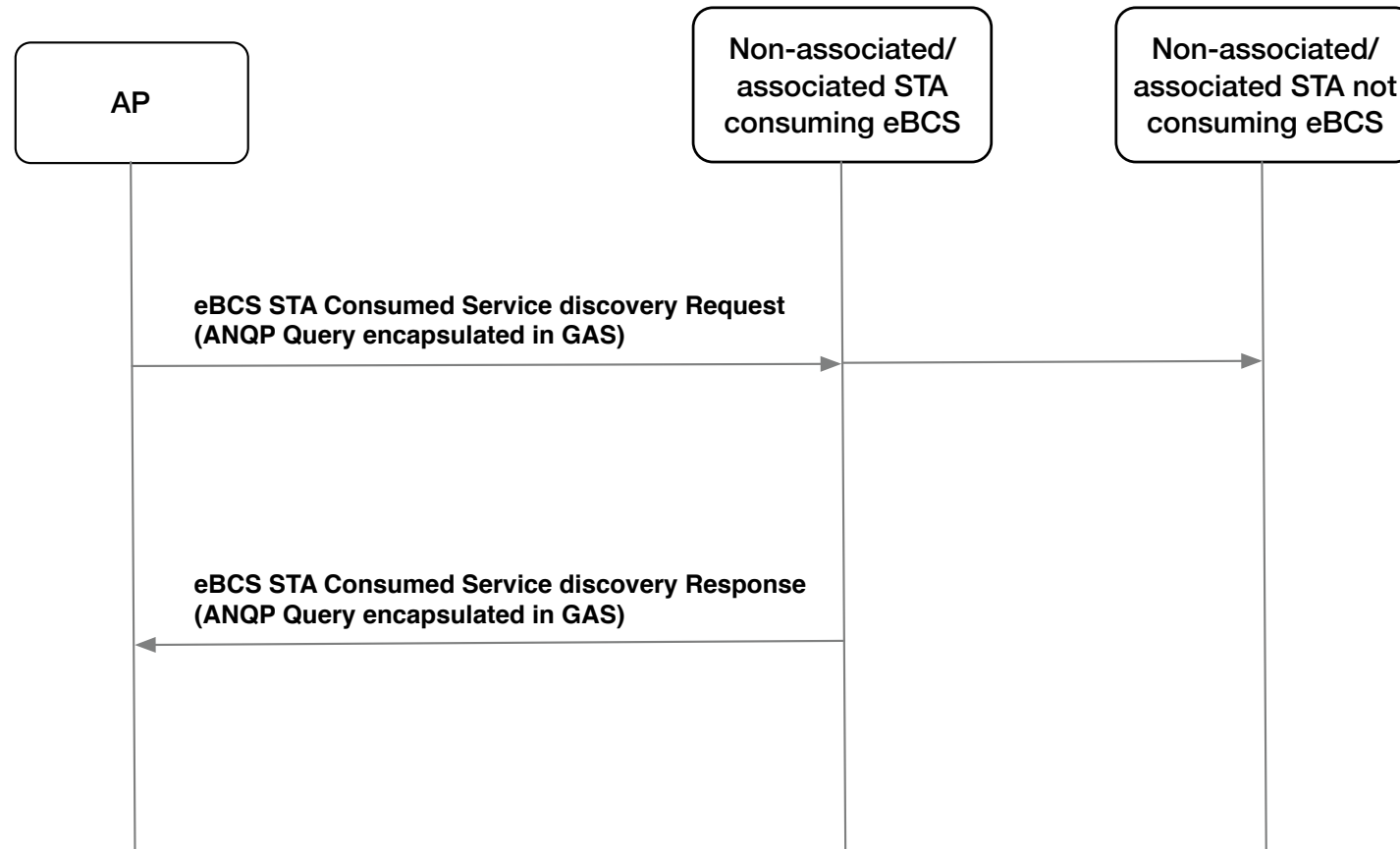
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Service discovery requirements

- Within the requirements document there is the explicit need for service discovery:
  - **R3.5.2:**   802.11bc amendment shall have a mechanism to facilitate the discovery of STAs consuming a particular broadcast service.
- This must be done for associated/un-associated STAs
- **Proposal is to use ANQP Request/Response originated from AP**

Operation

```
┌──────────┐        ┌──────────────────┐    ┌──────────────────┐
│          │        │ Non-associated/  │    │ Non-associated/  │
│    AP    │        │ associated STA   │    │ associated STA not│
│          │        │ consuming eBCS   │    │ consuming eBCS   │
└──────────┘        └──────────────────┘    └──────────────────┘
```

Replying STAs are the ones consuming the service

eBCS STA Consumed Service discovery Request
(ANQP Query encapsulated in GAS)

eBCS STA Consumed Service discovery Response
(ANQP Query encapsulated in GAS)

Considerations

- GAS in broadcast will require all STAs (associated/non-associated) to process the message.

  - Suggestion-> Reserve a groupcast address for STA service discovery

- Large number of STAs may be answering the request

  - Query must contain the service asked for (there should be no possibility to ask for all services)

  - This can also be mitigated by using GAS with a groupcast address (GAS implements mechanisms to reduce the signalling storms)

Straw Poll 1

- **Do you agree to add to the TGbc SFD:**
  - **TGbc shall define a mechanism for APs to discover services consumed by STAs through an extension to ANQP.**