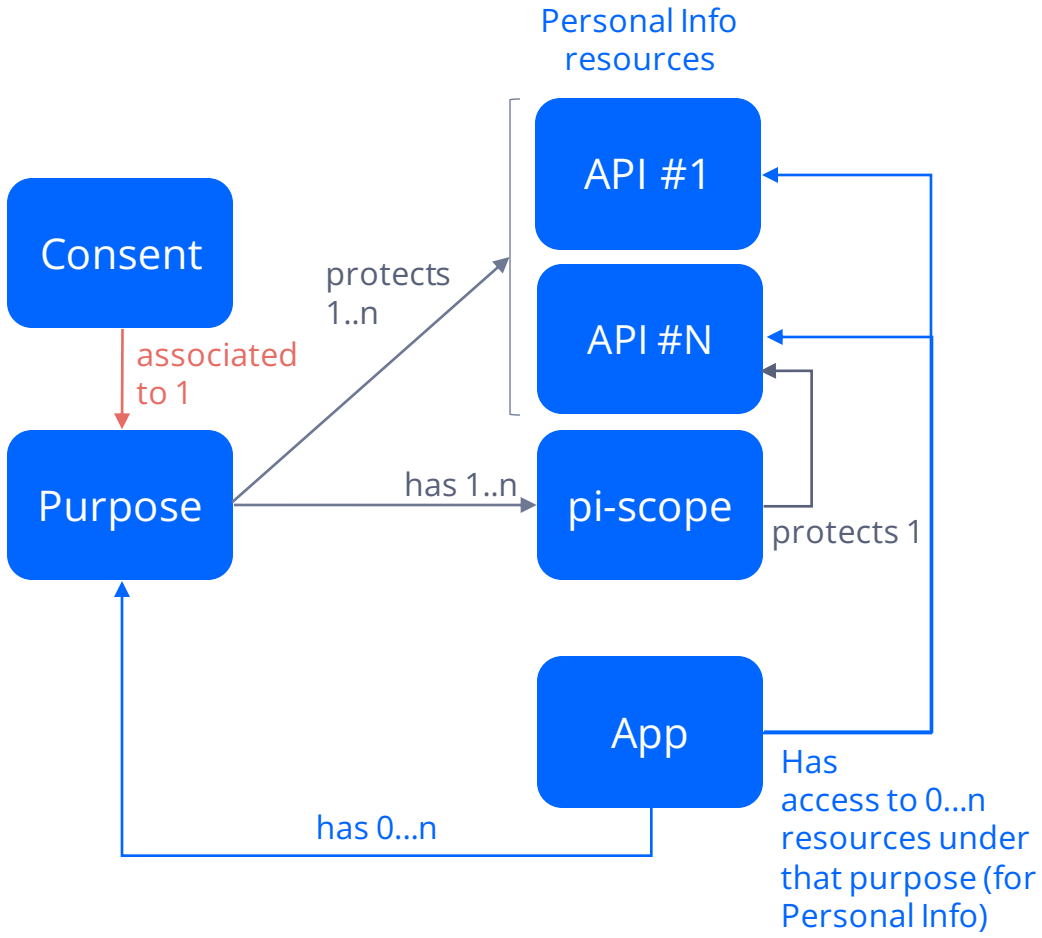
Telefónica

CAMARA APIs
User Consent Management

Why User Consent Management?

- **User Consent** is required by law to process **Personal Information**.
  - **User** is the human participant which is identified in Telco Operator side by a unique user identifier.
  - **Consent** is given by user to process Personal Information under a specific **purpose**
  - **Purpose** declares the reason for which processing that Personal Information is required by the application.
- Many APIs deal with personal information (e.g., location, IP address, MSISDN, etc), so it is necessary a technical solution to manage the user consent.
- And to do so…
  - We need to know **who the user is**.
  - We need to register the user consent under a certain **purpose.**
- How is it proposed to do it?
  - Proposed solution follows **OpenID Connect** (OIDC) standard for user authentication ➔ CIBA (Client-Initiated Backchannel Authentication) Flow.
  - A Consent API is proposed for third-parties to register the consent collected from the user**.**

High-level view of how concepts are related

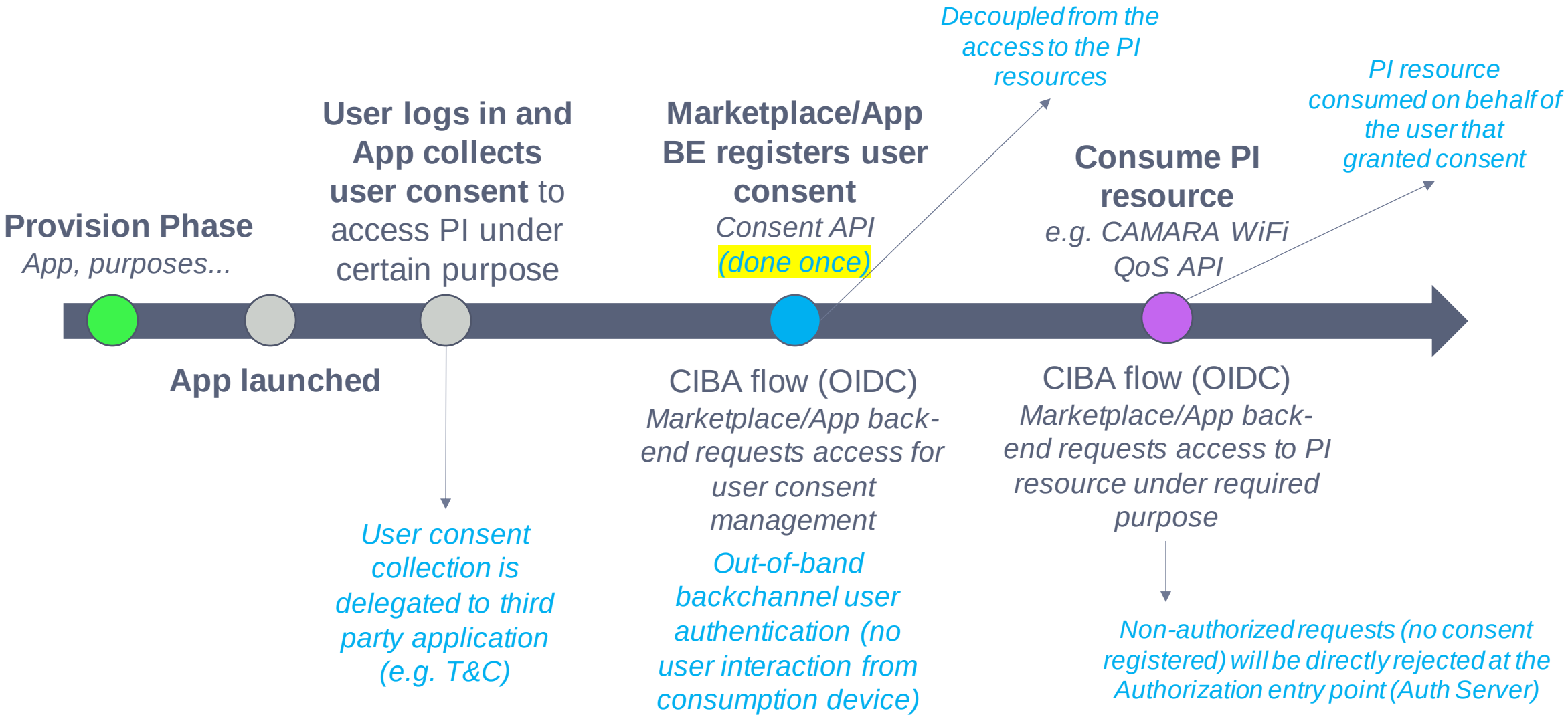


- Scopes tell what resources (e.g. APIs) are accessible under those scopes.
- A purpose has associated a set of personal information scopes (pi-scopes).
  - These are scopes which refer to resources providing access to Personal Information and thus requiring special protection.
  - Getting access to pi-scopes MUST always be done by explicitly declaring a purpose.
- Scopes are assigned to an application, granting access to APIs and other resources.
- Purposes are assigned to an application.

Therefore, an application will have access to:

- APIs or resources covered by the assigned scopes
- APIs or resources providing personal information under the assigned purpose (because of the pi-scopes included in that purpose):
  - **Only** if user has granted her consent for that purpose
  - Which may happen automatically (automatic purposes) or may need an explicit user action to provide consent. In the second case, the consent is created and stored and will be validated during authorization.

High level journey example – terms & conditions



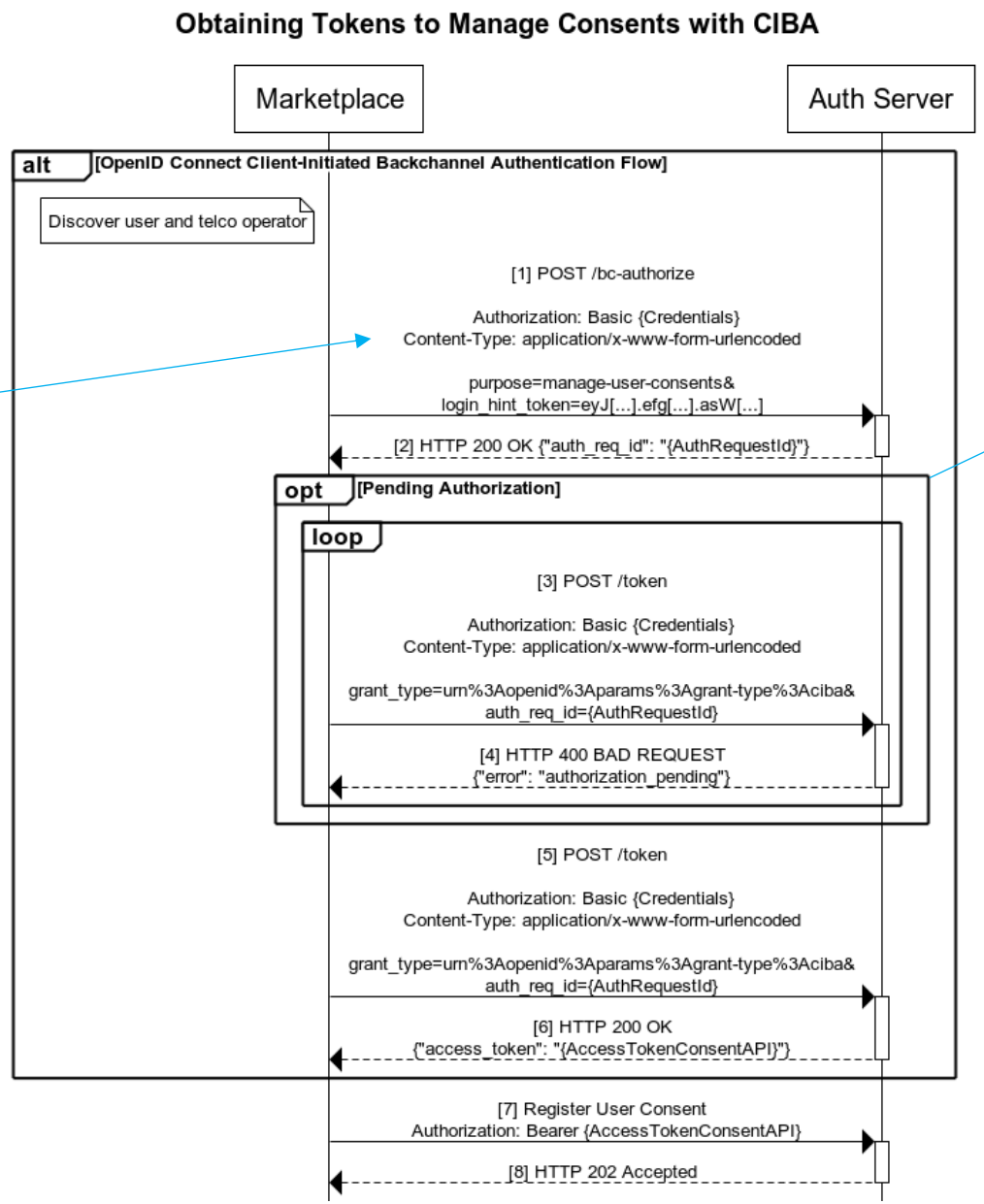
CIBA flow (OIDC)

Consent is **registered once**.

Additional `purpose` query parameter to request a list of purposes in the authorization request (e.g. **`manage-user-consents`**).

`login_hint_token`: A signed JWT token containing information to identify the end-user.

```
{
  "aud": "https://auth.example.baikalplatform.com/",
  "iss": "https://marketplace-issuer",
  "exp": 1504807731,
  "iat": 1504804131,
  "identifier_type": “ip",
  "identifier": “66.77.88.99"
}
```



The Auth Server may identify the user and choose a channel to authenticate the user and authorize the request...

If user has not been authenticated or has not authorized the request yet, an authorization pending error is returned.

CIBA flow (OIDC)

The call must be done **on behalf of the user that granted consent**.

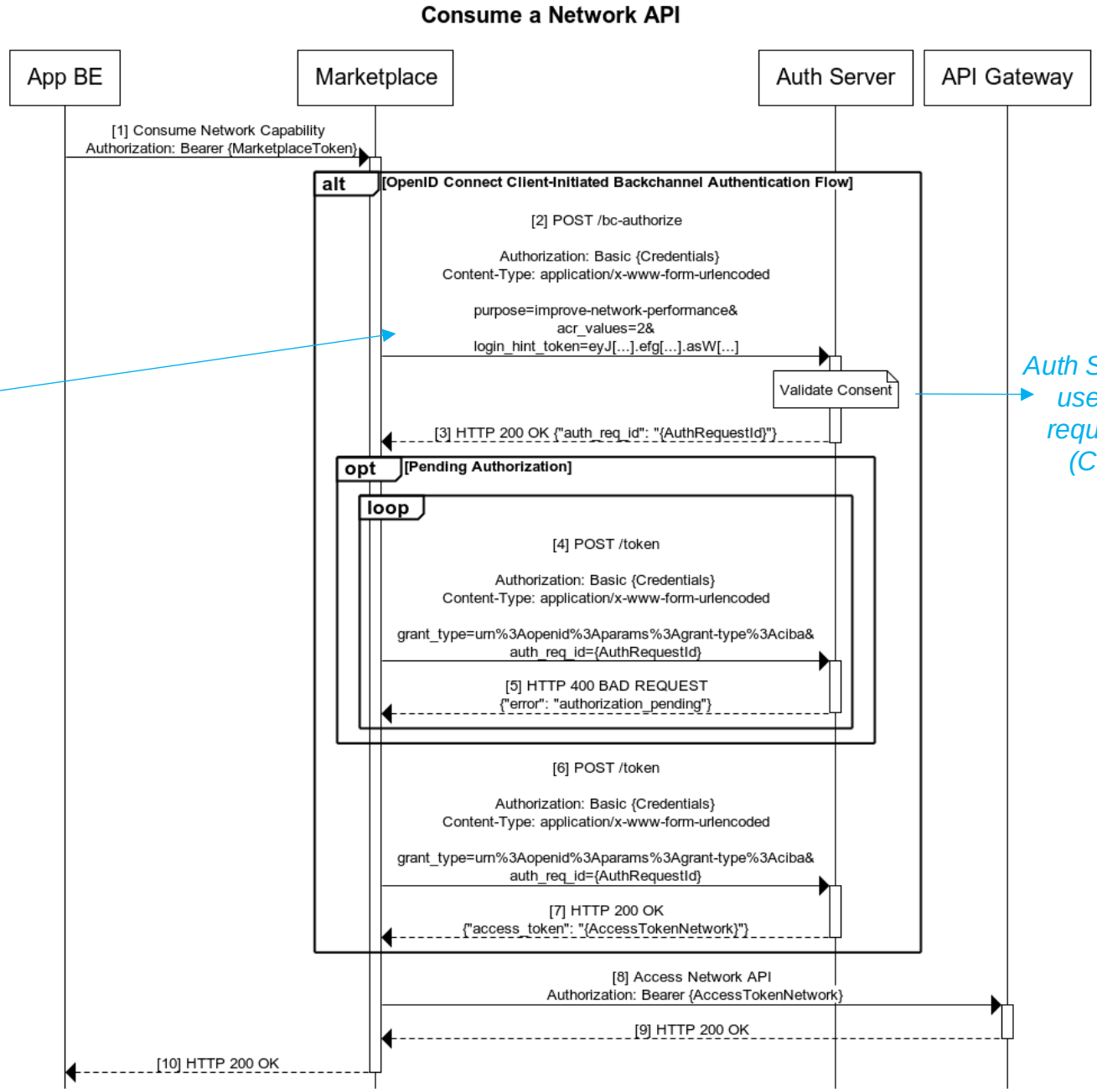
Additional `purpose` query parameter to request a list of purposes in the authorization request (e.g. **`improve-network-performance`**).

`acr_values` the acr values that the IdP is going to use for processing the authentication request.

`login_hint_token`: A signed JWT token containing information to identify the end-user.

```
{
  "aud": "https://auth.example.baikalplatform.com/",
  "iss": "https://marketplace-issuer",
  "exp": 1504807731,
  "iat": 1504804131,
  "identifier_type": “ip",
  "identifier": “66.77.88.99"
}
```

** The values for the strings in the identifier_type claim could be: ip, phone_number and sub.*



Auth Server validates user consent for required purpose. (Consent API)


Telefónica