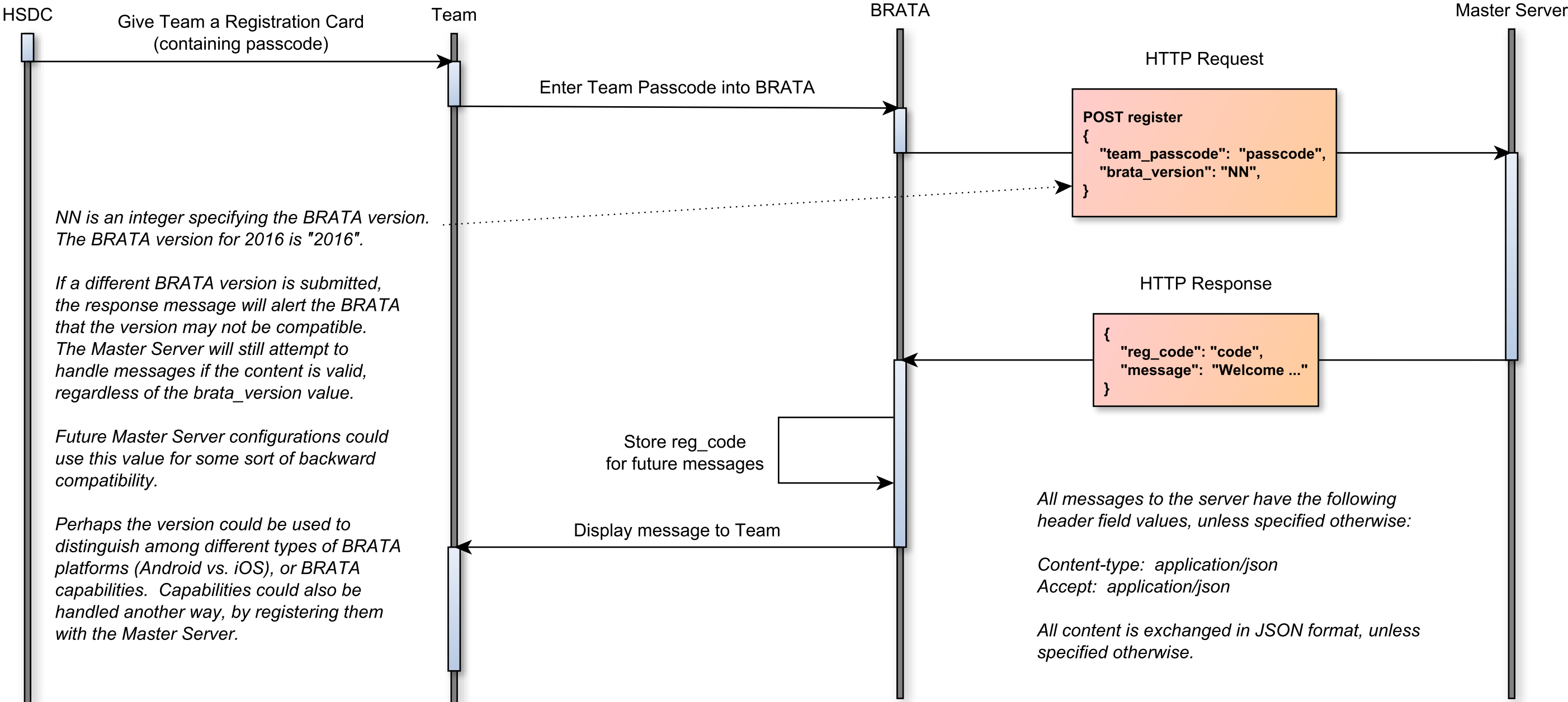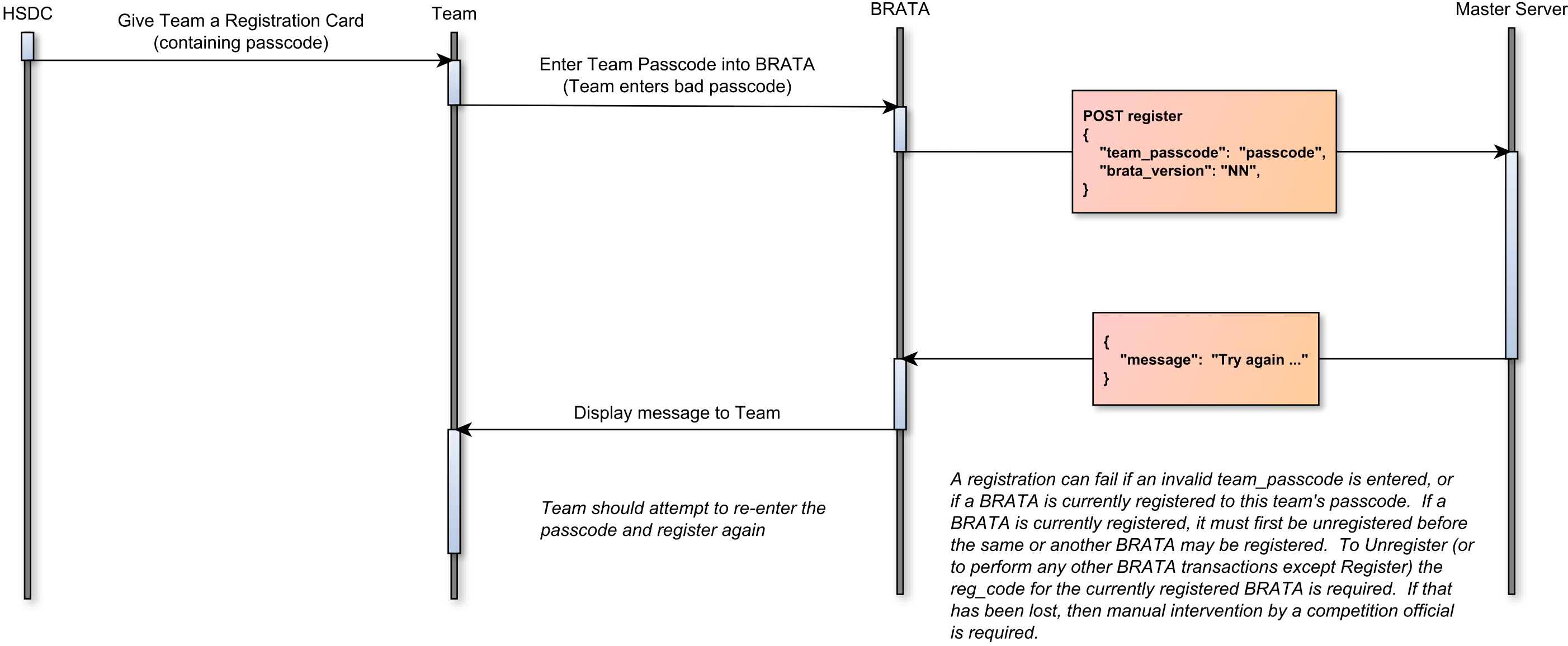# BRATA Registration

A BRATA device must be Registered with the Master Server to be active and perform competition functions. Messages from an unregistered BRATA will receive a response message but will have no other effect.

A Team may have a maximum of one BRATA registered at any time. Attempts to register another BRATA while one is active will fail.
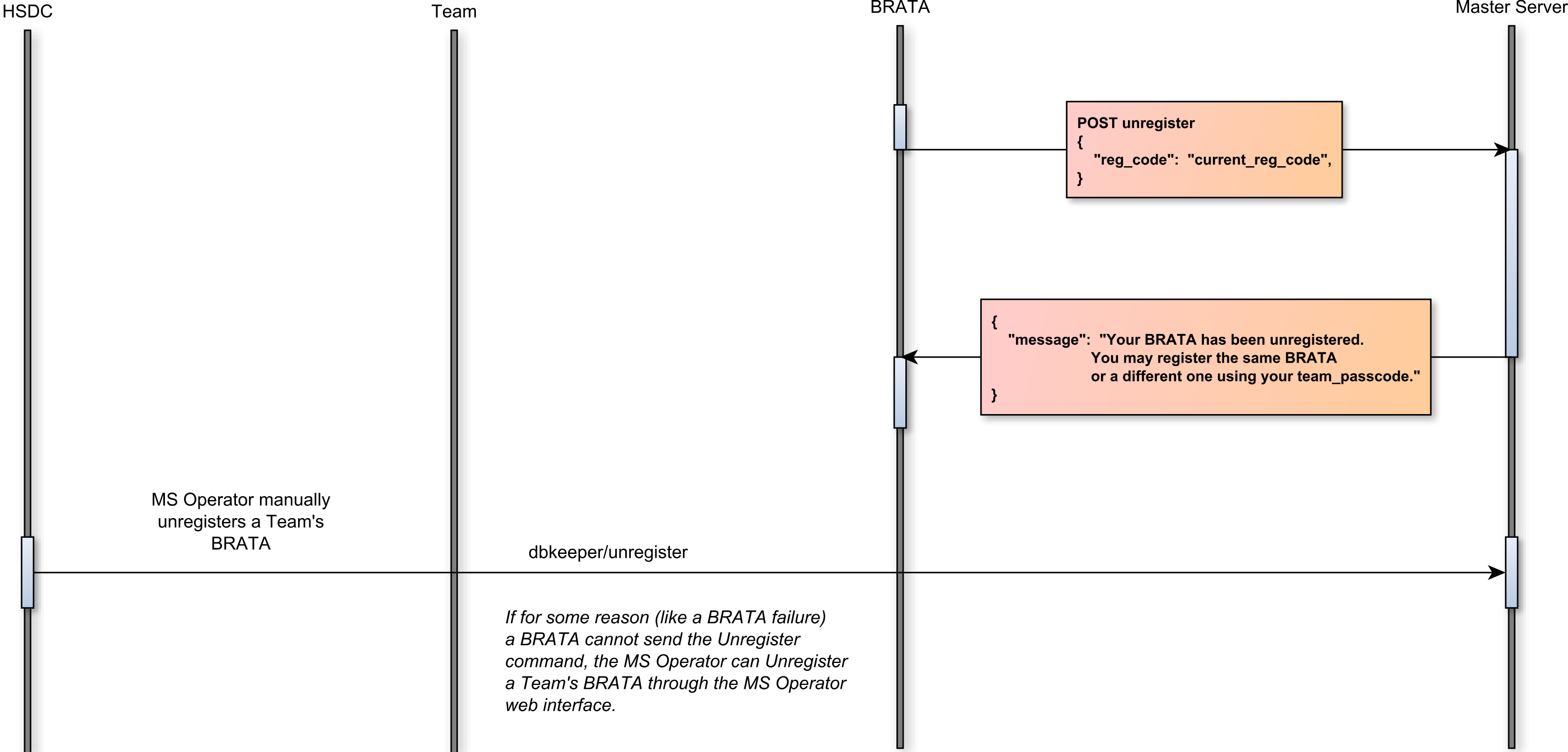
Successful Registration

HSDC | Team | BRATA | Master Server

Give Team a Registration Card
(containing passcode)

Enter Team Passcode into BRATA

HTTP Request

```
POST register
{
    "team_passcode":  "passcode",
    "brata_version": "NN",
}
```

NN is an integer specifying the BRATA version. The BRATA version for 2016 is "2016".

If a different BRATA version is submitted, the response message will alert the BRATA that the version may not be compatible. The Master Server will still attempt to handle messages if the content is valid, regardless of the brata_version value.

Future Master Server configurations could use this value for some sort of backward compatibility.

Perhaps the version could be used to distinguish among different types of BRATA platforms (Android vs. iOS), or BRATA capabilities. Capabilities could also be handled another way, by registering them with the Master Server.

HTTP Response

```
{
    "reg_code": "code",
    "message":  "Welcome ..."
}
```

Store reg_code
for future messages

Display message to Team

All messages to the server have the following header field values, unless specified otherwise:

Content-type: application/json
Accept: application/json

All content is exchanged in JSON format, unless specified otherwise.

Failed Registration

HSDC | Team | BRATA | Master Server

Give Team a Registration Card
(containing passcode)

Enter Team Passcode into BRATA
(Team enters bad passcode)

```
POST register
{
    "team_passcode":  "passcode",
    "brata_version": "NN",
}
```

```
{
    "message":  "Try again ..."
}
```

Display message to Team

Team should attempt to re-enter the passcode and register again

A registration can fail if an invalid team_passcode is entered, or if a BRATA is currently registered to this team's passcode. If a BRATA is currently registered, it must first be unregistered before the same or another BRATA may be registered. To Unregister (or to perform any other BRATA transactions except Register) the reg_code for the currently registered BRATA is required. If that has been lost, then manual intervention by a competition official is required.

Unregister

HSDC | Team | BRATA | Master Server

```
POST unregister
{
    "reg_code":  "current_reg_code",
}
```

```
{
    "message":  "Your BRATA has been unregistered.
                 You may register the same BRATA
                 or a different one using your team_passcode."
}
```

MS Operator manually
unregisters a Team's
BRATA

dbkeeper/unregister

If for some reason (like a BRATA failure) a BRATA cannot send the Unregister command, the MS Operator can Unregister a Team's BRATA through the MS Operator web interface.

BRATA Registration State Diagram