

[TP] - Strategic Deconfliction

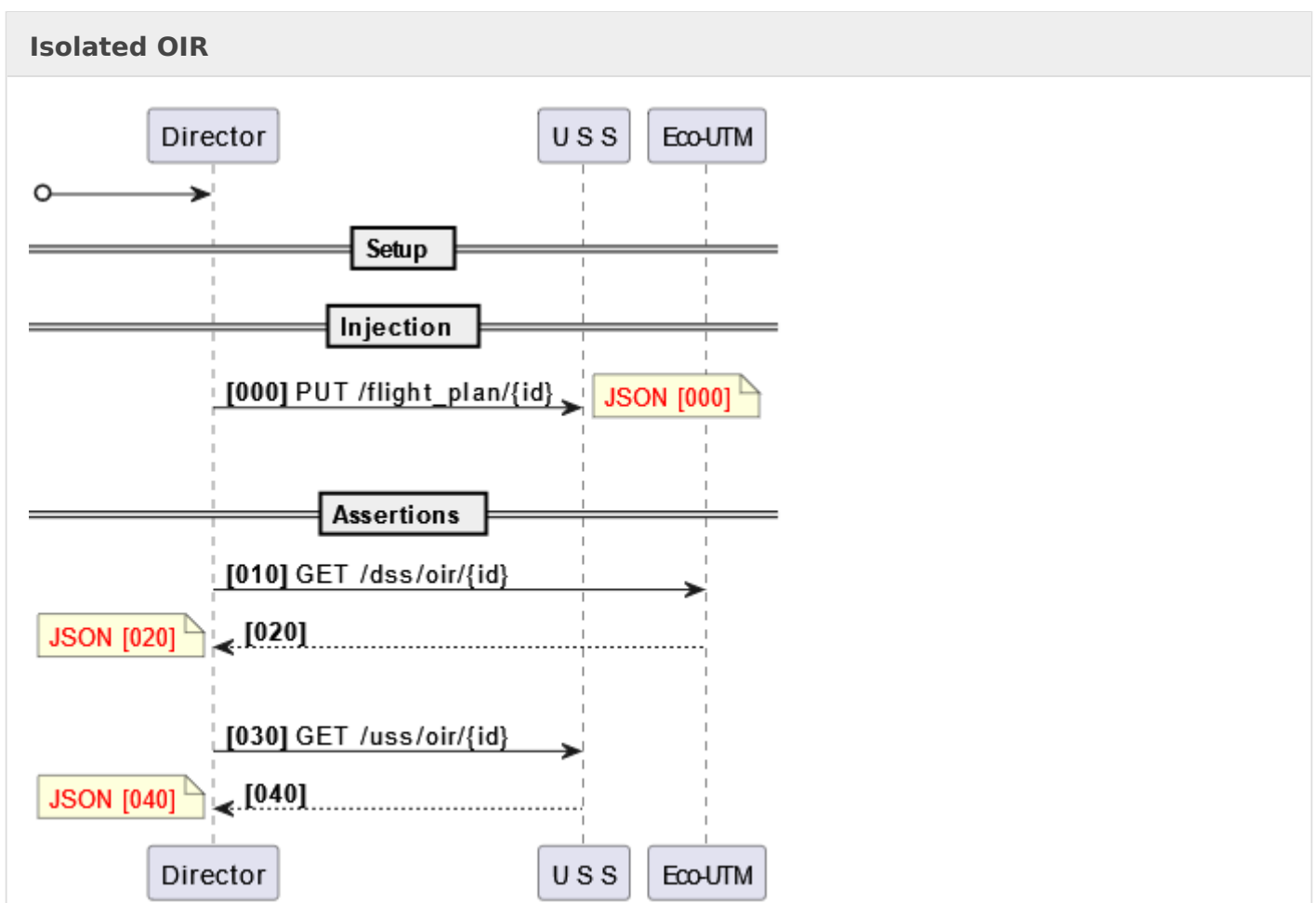
- Deconfliction OpenAPI: <https://github.com/dp-icea/Protocols/tree/main/utm>

- Injection OpenAPI:

https://github.com/interuss/automated_testing_interfaces/tree/4e07f46eb4452da761fb1658d3775d801d19312b/flight_planning/v1

SCD

Case scd-1 - Isolated OIR:



JSON [000]

```
{
  "chave": "valor"
}
```

JSON [020]

```
{
  "operational_intent_reference": {
    "id": "2f8343be-6482-4d1b-a474-16847e01af1e",
    "flight_type": "VLOS",
    "manager": "uss1",
    "uss_availability": "Unknown",
    "version": 1,
    "state": "Accepted",
    "ovn": "9d158f59-80b7-4c11-9c0c-8a2b4d936b2d",
    "time_start": {
      "value": "1985-04-12T23:20:50.52Z",
      "format": "RFC3339"
    },
    "time_end": {
      "value": "1985-04-12T23:20:50.52Z",
      "format": "RFC3339"
    },
    "uss_base_url": "https://uss.example.com/utm",
    "subscription_id": "78ea3fe8-71c2-4f5c-9b44-9c02f5563c6f"
  }
}
```

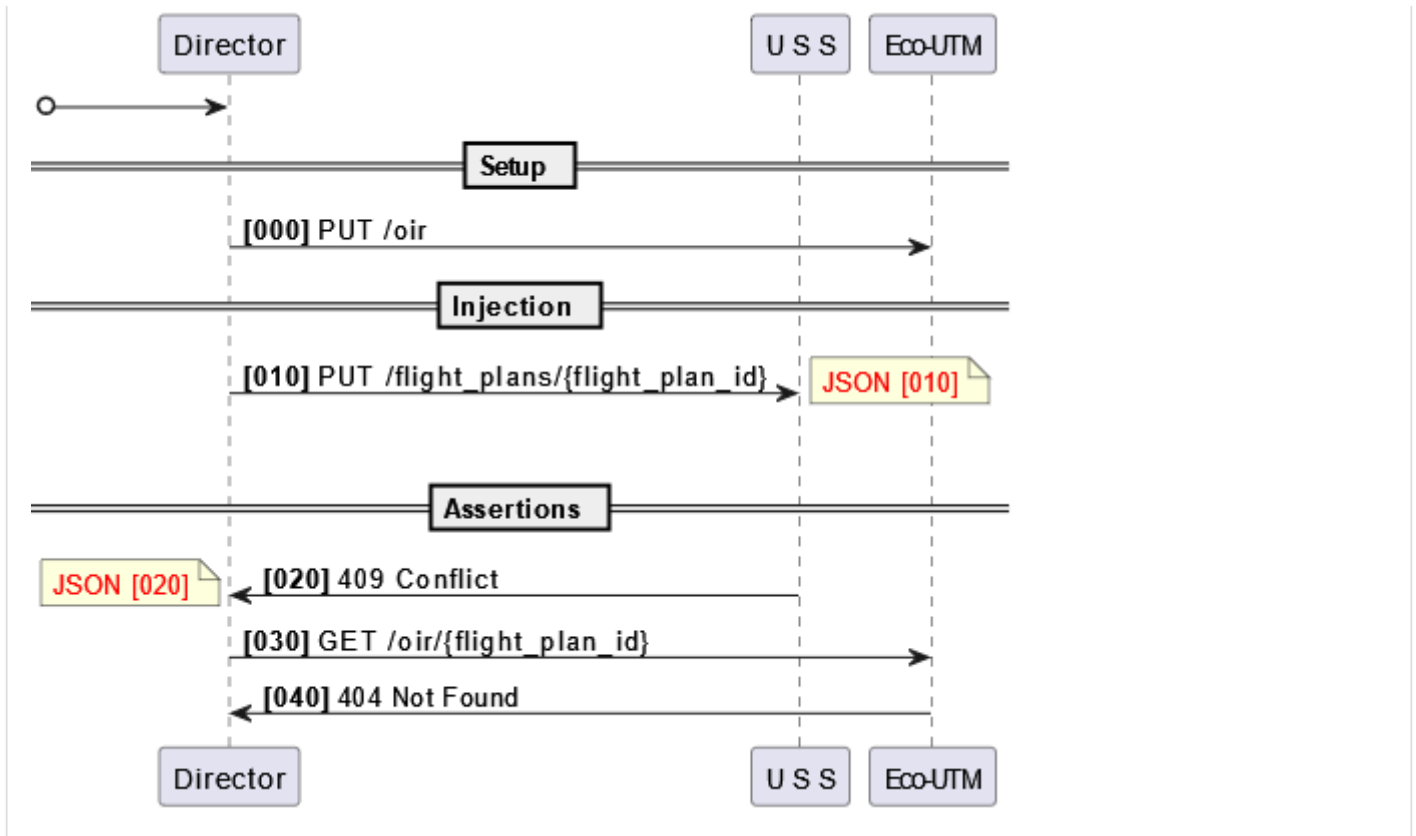
JSON [040]

```
{
  "operational_intent": {
    "reference": {
```

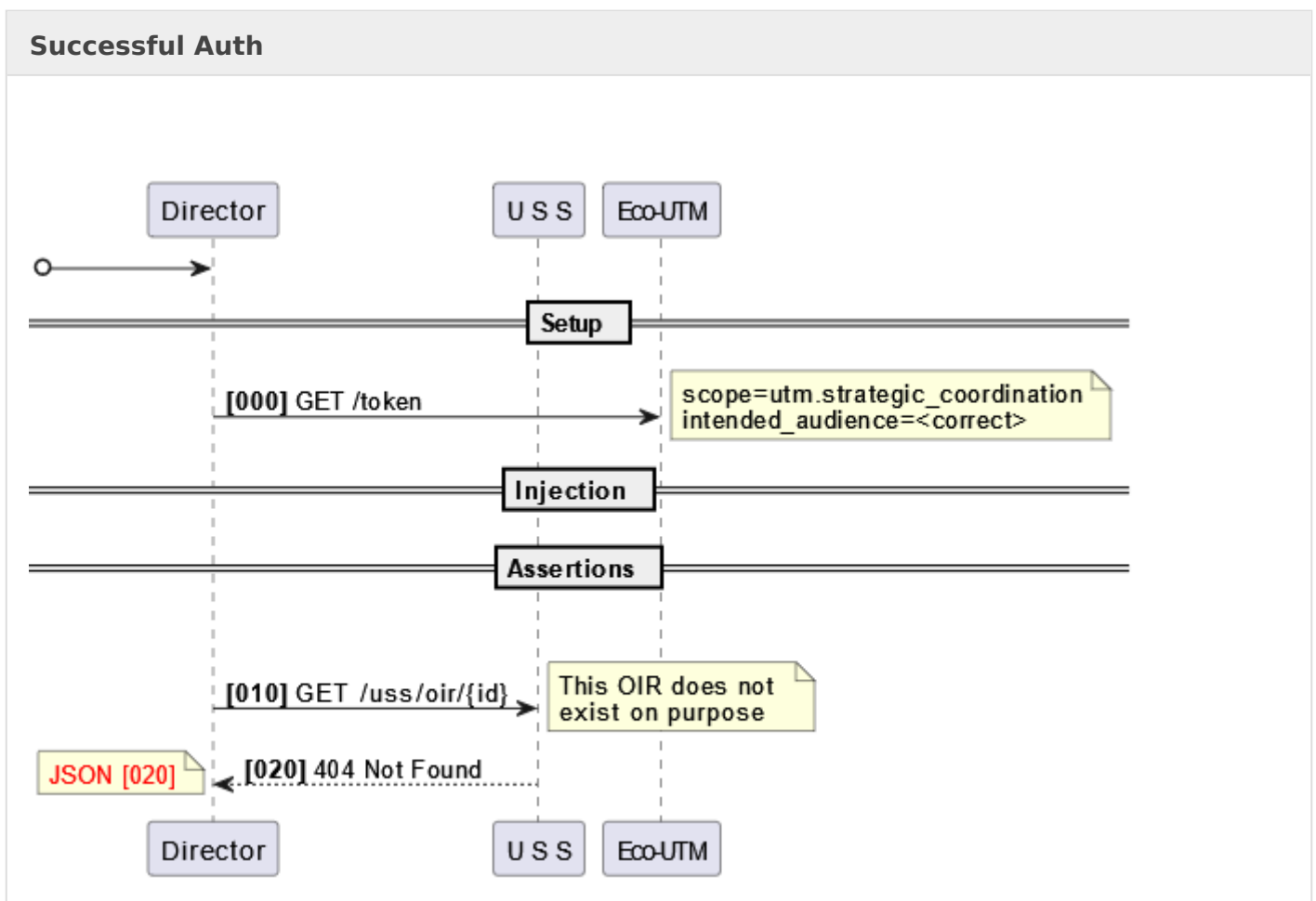
```
"id": "2f8343be-6482-4d1b-a474-16847e01af1e",
"flight_type": "VLOS",
"manager": "uss1",
"uss_availability": "Unknown",
"version": 1,
"state": "Accepted",
"ovn": "9d158f59-80b7-4c11-9c0c-8a2b4d936b2d",
"time_start": {
  "value": "1985-04-12T23:20:50.52Z",
  "format": "RFC3339"
},
"time_end": {
  "value": "1985-04-12T23:20:50.52Z",
  "format": "RFC3339"
},
"uss_base_url": "https://uss.example.com/utm",
"subscription_id": "78ea3fe8-71c2-4f5c-9b44-9c02f5563c6f"
},
"details": {
  "volumes": [],
  "off_nominal_volumes": [],
  "priority": 0
}
}
```

Case scd-2 - Conflict OIR:

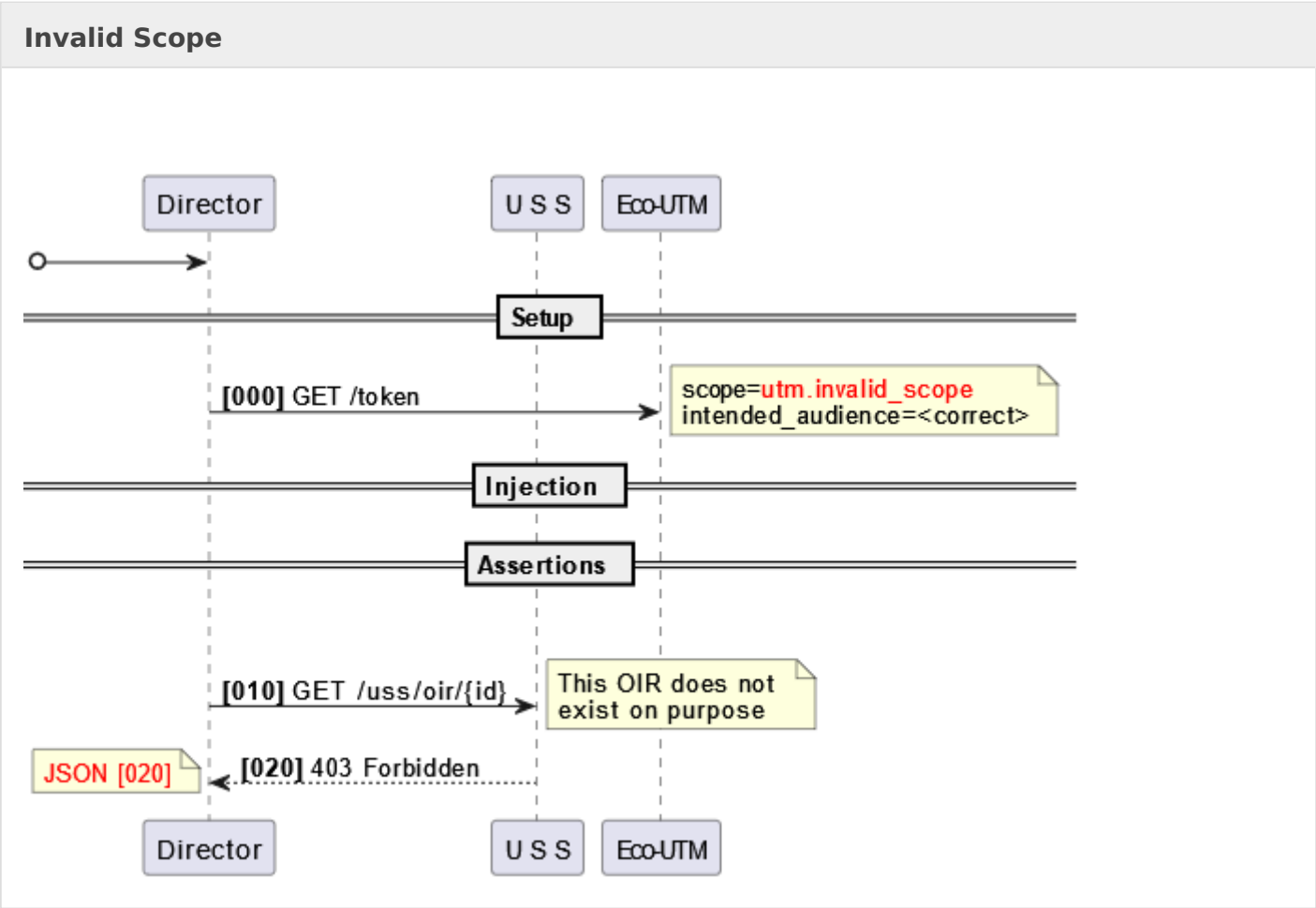
Conflict OIR - Not implemented



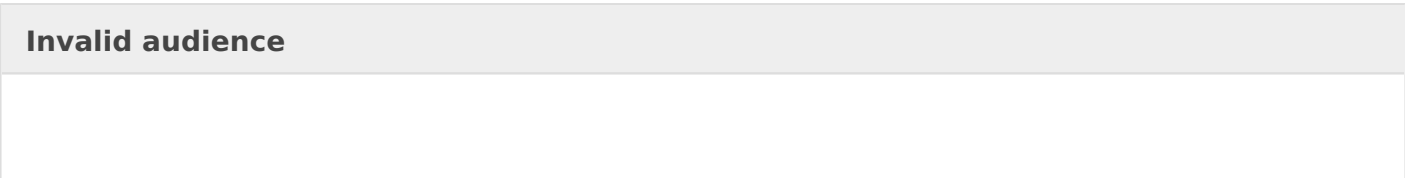
Case auth-1 - Successful Auth

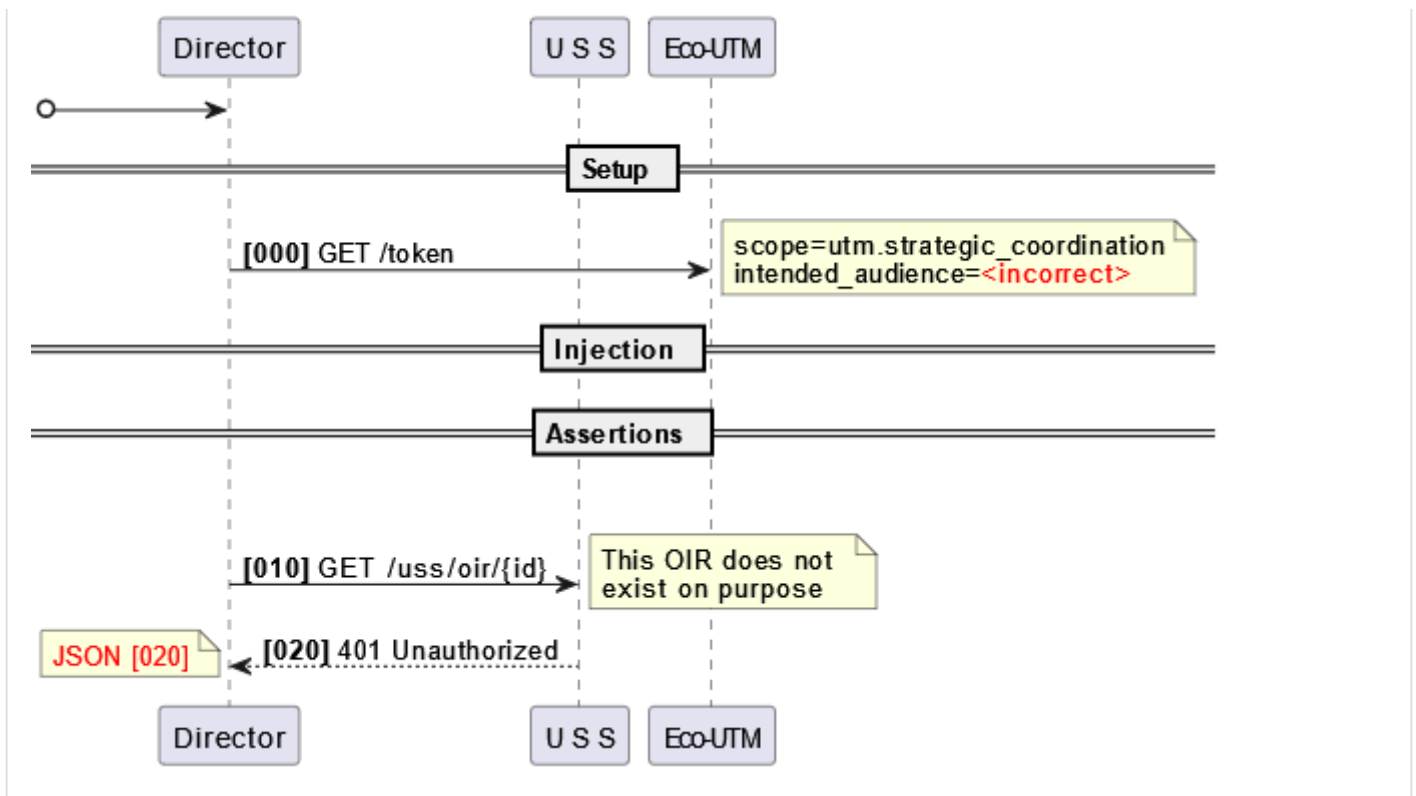


Case auth-2 - Invalid Scope



Case auth-3 - Invalid audience

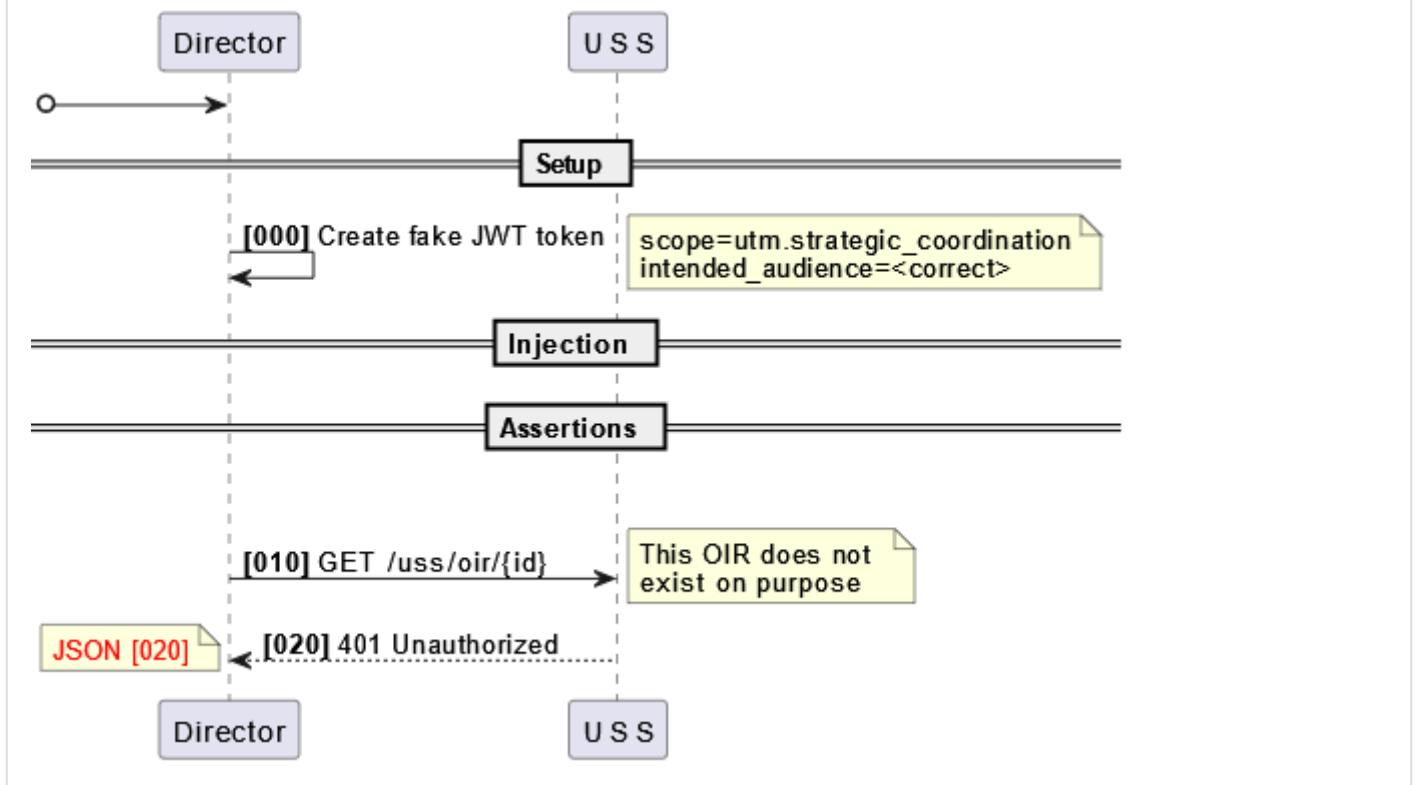




Case auth-4 - Invalid token signature

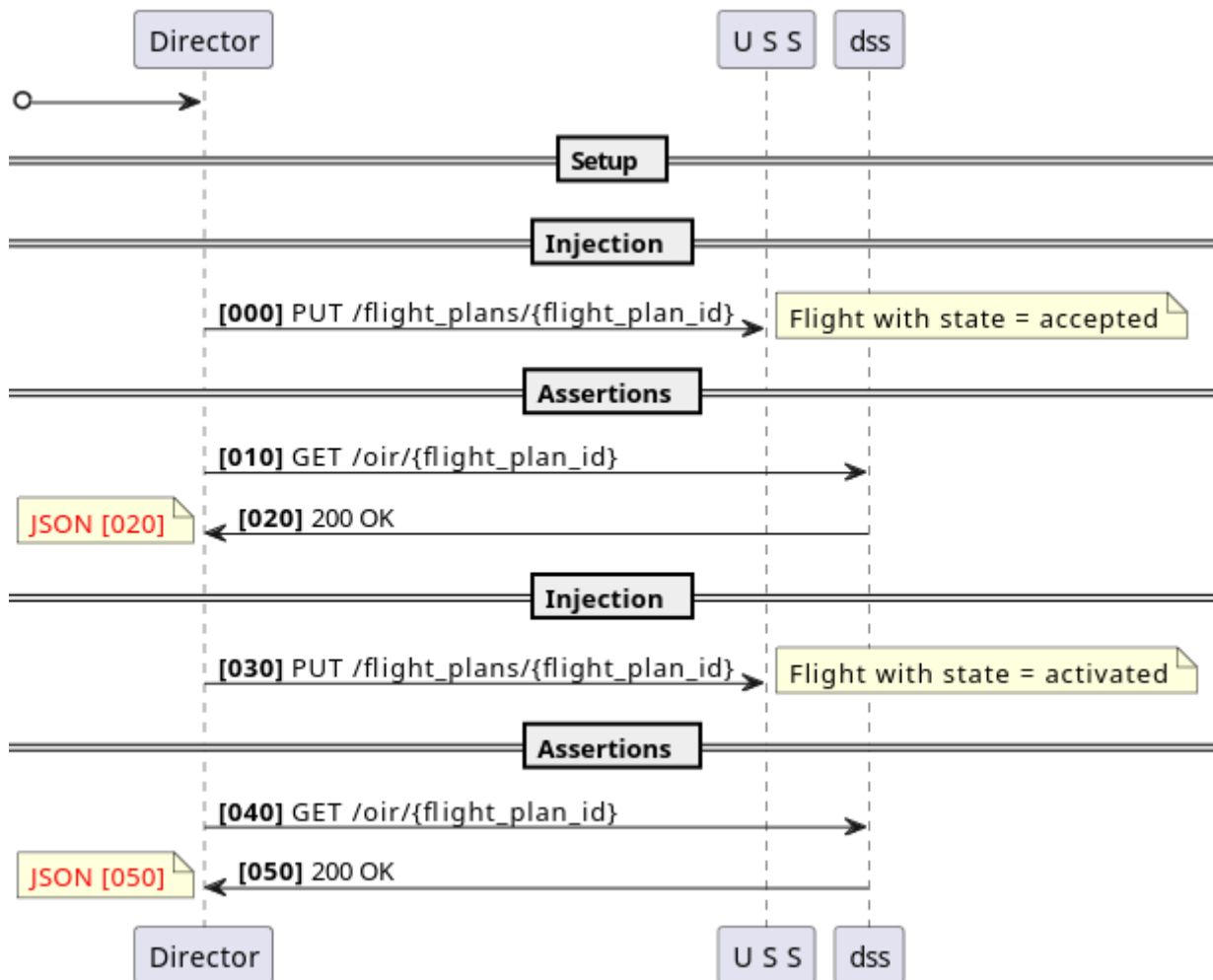
Invalid token signature

In this test, the director creates an invalid token, that was not issued by an authorized token provider.



Case OIR - OIR activation

OIR activation



JSON 020

```
{
  "operational_intent_reference": {
    "id": "2f8343be-6482-4d1b-a474-16847e01af1e",
    "flight_type": "VLOS",
    "manager": "uss1",
    "uss_availability": "Unknown",
    "version": 1,
    "state": "Accepted",
    "ovn": "9d158f59-80b7-4c11-9c0c-8a2b4d936b2d",
```

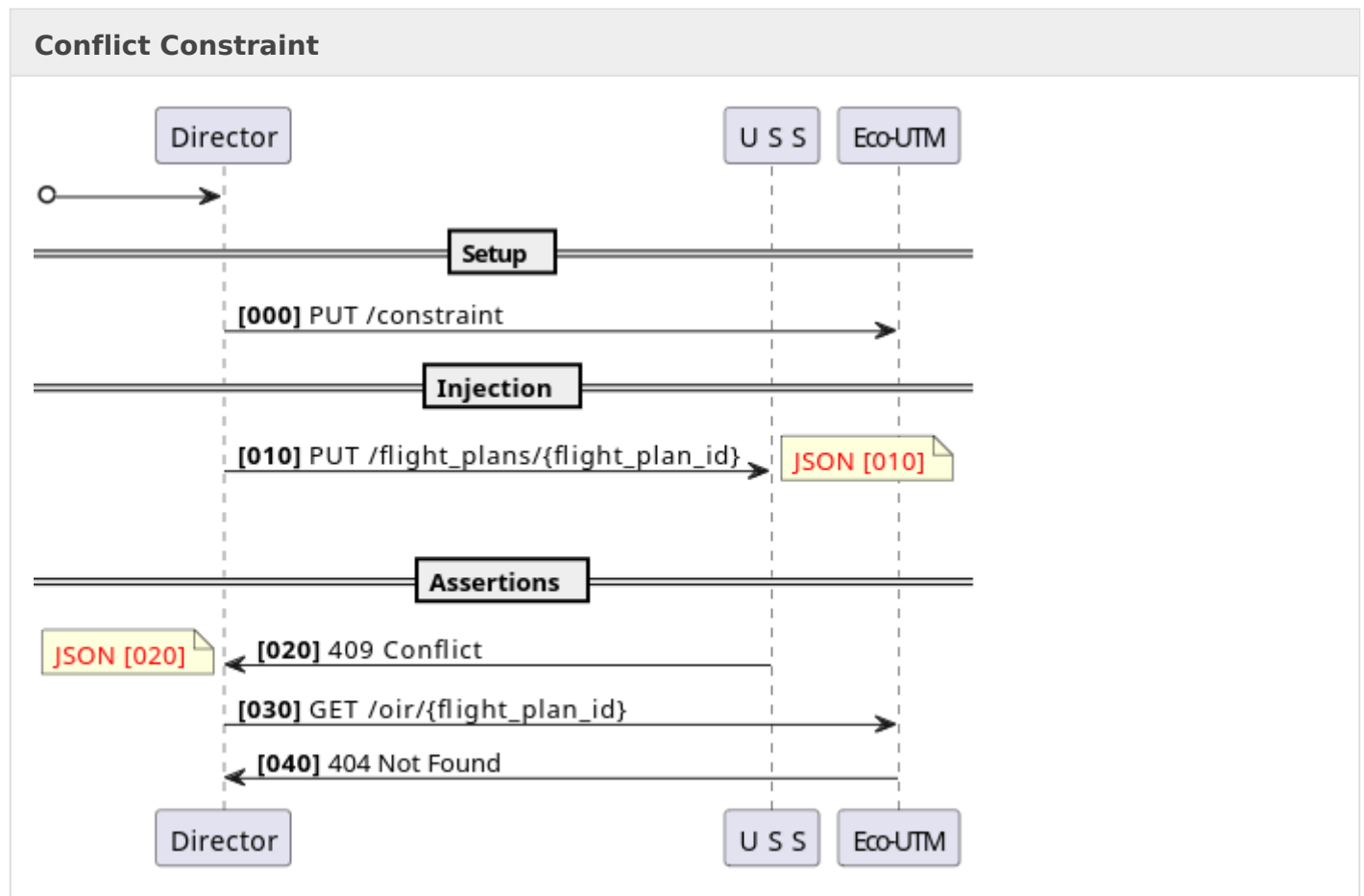
```
"time_start": {
  "value": "1985-04-12T23:20:50.52Z",
  "format": "RFC3339"
},
"time_end": {
  "value": "1985-04-12T23:20:50.52Z",
  "format": "RFC3339"
},
"uss_base_url": "https://uss.example.com/utm",
"subscription_id": "78ea3fe8-71c2-4f5c-9b44-9c02f5563c6f"
}
}
```

JSON 050

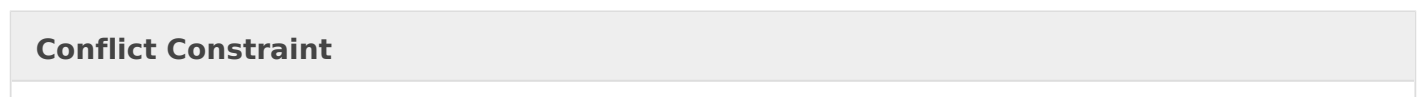
```
{
  "operational_intent_reference": {
    "id": "2f8343be-6482-4d1b-a474-16847e01af1e",
    "flight_type": "VLOS",
    "manager": "uss1",
    "uss_availability": "Unknown",
    "version": 1,
    "state": "Accepted",
    "ovn": "9d158f59-80b7-4c11-9c0c-8a2b4d936b2d",
    "time_start": {
      "value": "1985-04-12T23:20:50.52Z",
      "format": "RFC3339"
    },
    "time_end": {
      "value": "1985-04-12T23:20:50.52Z",
      "format": "RFC3339"
    },
    "uss_base_url": "https://uss.example.com/utm",
    "subscription_id": "78ea3fe8-71c2-4f5c-9b44-9c02f5563c6f"
  }
}
```

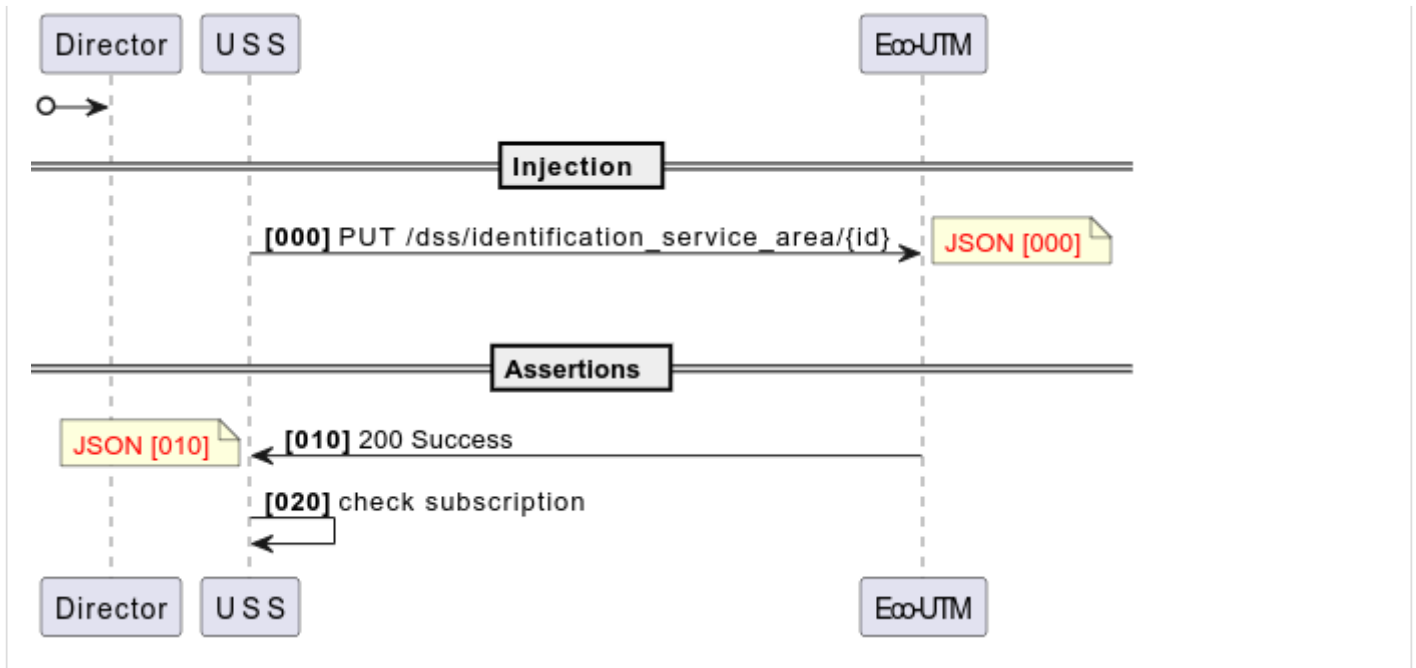
```
}
```

Case OIR - Conflict Constraint:

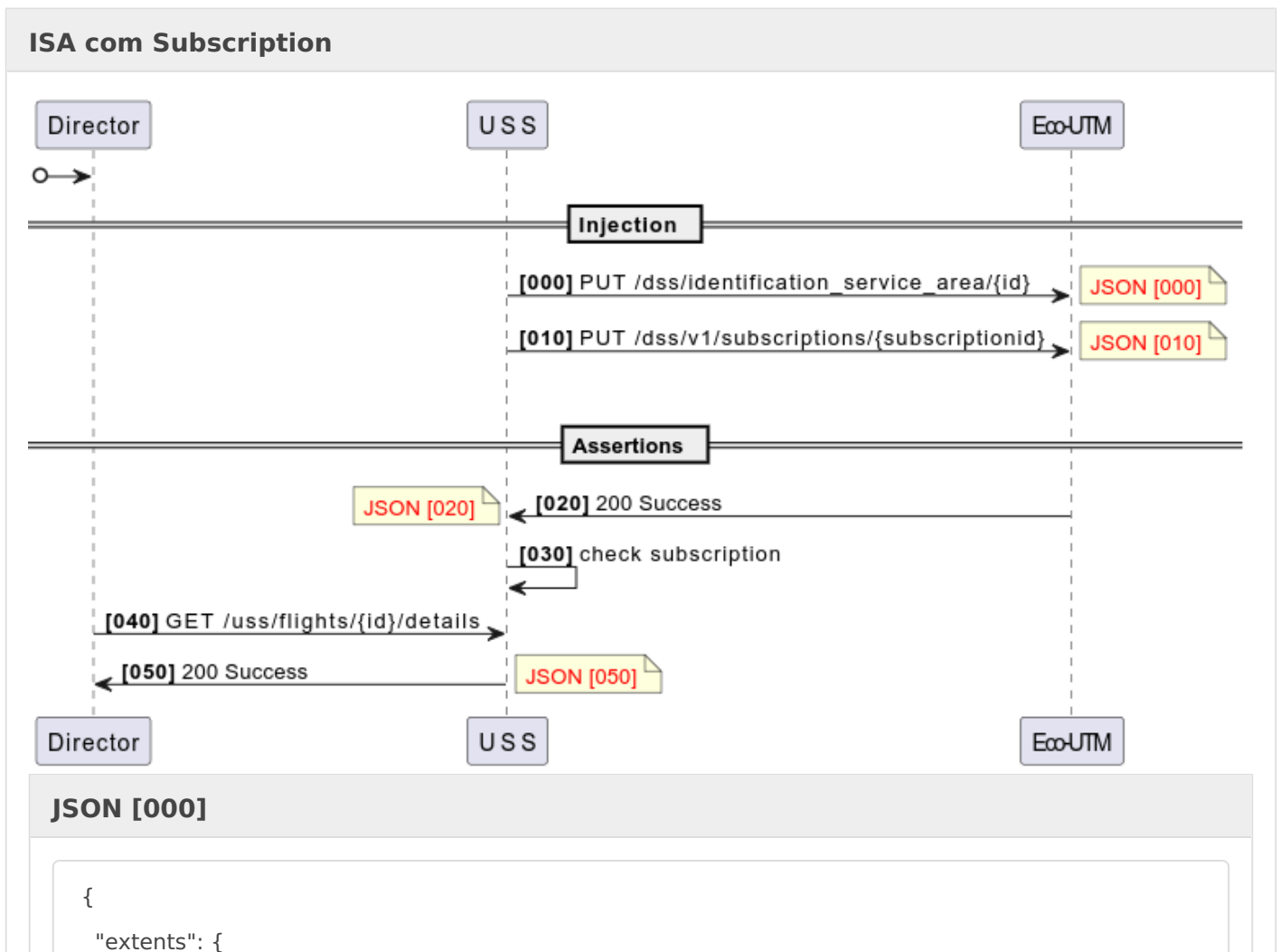


Case ISA 1 - without subscription





Case ISA 2 - with subscription



```
"volume": {  
  "outline_circle": {  
    "center": {  
      "lng": -118.456,  
      "lat": 34.123  
    },  
    "radius": {  
      "value": 300.183,  
      "units": "M"  
    }  
  },  
  "outline_polygon": {  
    "vertices": [  
      {  
        "lng": -118.456,  
        "lat": 34.123  
      },  
      {  
        "lng": -118.456,  
        "lat": 34.123  
      },  
      {  
        "lng": -118.456,  
        "lat": 34.123  
      }  
    ]  
  },  
  "altitude_lower": {  
    "value": 19.5,  
    "reference": "W84",  
    "units": "M"  
  },  
  "altitude_upper": {  
    "value": 19.5,  
    "reference": "W84",  
    "units": "M"  
  }  
},
```

```
"time_start": {
  "value": "1985-04-12T23:20:50.52Z",
  "format": "RFC3339"
},
"time_end": {
  "value": "1985-04-12T23:20:50.52Z",
  "format": "RFC3339"
}
},
"uss_base_url": "https://example.com/rid"
}
```

JSON [010]

```
{
  "extents": {
    "volume": {
      "outline_circle": {
        "center": {
          "lng": -118.456,
          "lat": 34.123
        },
        "radius": {
          "value": 300.183,
          "units": "M"
        }
      },
      "outline_polygon": {
        "vertices": [
          {
            "lng": -118.456,
            "lat": 34.123
          },
          {
            "lng": -118.456,
```

```
    "lat": 34.123
  },
  {
    "lng": -118.456,
    "lat": 34.123
  }
]
},
"altitude_lower": {
  "value": 100000,
  "reference": "W84",
  "units": "M"
},
"altitude_upper": {
  "value": 100000,
  "reference": "W84",
  "units": "M"
}
},
"time_start": {
  "value": "1985-04-12T23:20:50.52Z",
  "format": "RFC3339"
},
"time_end": {
  "value": "1985-04-12T23:20:50.52Z",
  "format": "RFC3339"
}
},
"uss_base_url": "https://uss.example.com/utm",
"notify_for_operational_intents": false,
"notify_for_constraints": false
}
```

```
{
  "extents": {
    "volume": {
      "outline_circle": {
        "center": {
          "lng": -118.456,
          "lat": 34.123
        },
        "radius": {
          "value": 300.183,
          "units": "M"
        }
      },
      "outline_polygon": {
        "vertices": [
          {
            "lng": -118.456,
            "lat": 34.123
          },
          {
            "lng": -118.456,
            "lat": 34.123
          },
          {
            "lng": -118.456,
            "lat": 34.123
          }
        ]
      },
      "altitude_lower": {
        "value": 19.5,
        "reference": "W84",
        "units": "M"
      },
      "altitude_upper": {
        "value": 19.5,
```

```
    "reference": "W84",
    "units": "M"
  },
  "time_start": {
    "value": "1985-04-12T23:20:50.52Z",
    "format": "RFC3339"
  },
  "time_end": {
    "value": "1985-04-12T23:20:50.52Z",
    "format": "RFC3339"
  }
}
```

JSON [050]

```
{
  "details": {
    "id": "b41f2785-1182-4c2e-82d5-f72f754b3fe2.0dfe0e82-fd7a-44d9-af17-7fdd42751b45",
  },
  "uas_id": {
    "registration_id": "PR-333334433",
  },
  "operator_id": "HUKMBB",
  "operator_location": {
    "position": {
      "lng": -118.456,
      "lat": 34.123
    },
    "altitude": {
      "value": 19.5,
      "reference": "W84",
    }
  }
}
```

```
    "units": "M"  
  },  
  "altitude_type": "Takeoff"  
},  
"operation_description": "Descrição do voo, mesma descrição informada no SARPAS"  
}  
}
```

Revision #19

Created 5 November 2024 13:23:51 by Rafael Albarello

Updated 5 February 2025 11:39:22 by Fernanda Serra