API Datasheet

Dynamic Airspace Connectivity Data

The Drone Ecosystem will now have advanced capabilities to get information about the connectivity delivered by 4/5G networks in the air along an airspace volume for a future date and time.

CHARACTERISTICS

- Delivers comprehensive analysis for drone operators by providing data about mobile network coverage in specific geographic areas.

- Identifies which are the "black volumes" to avoid the risk of losing control of the drone due to connectivity shortage.

- Gives the information needed to generate a flight plan to ensure compliance with aviation laws and obtain the required flight authorization.

INDUSTRIES

ICT SERVICES

TRANSPORTATION & LOGISTICS

SERVICES

LOCATION
POPULATION DENSITY DATA

PRODUCT FEATURES

- ❖ UAS (Unmanned Aerial Systems) operators can now have information about connectivity conditions for a certain service level in the airspace to check if it is sufficient for the mission planned.

- ❖ Dynamic information of coverage is provided to check if there is sufficient connectivity available along a considered flight route, to ensure the safety of the BVLOS (Beyond Visual Line of Sight) operation.

BENEFITS

- ✓ Drone operators will now be empowered to make informed decisions to ensure efficiency of operations.

- ✓ Capabilities to prioritize areas with the best connectivity conditions to minimize risks of losing control of the drone.

- ✓ Optimized routes that ensure continuous communication with the drone.

POPULAR USE CASES

DELIVERY SYSTEMS

TRANSPORT & LOGISTICS

Services: Location

Drones are revolutionizing the delivery industry by offering an efficient and innovative solution for transporting goods. As unmanned aerial vehicles, drones can navigate through various terrains and congested urban areas, delivering packages directly to clients' desired destination points. This delivery system significantly reduces delivery times, especially for urgent or time-sensitive deliveries. Furthermore, drones can reach remote or hard-to-access locations, making them ideal for delivering medical supplies, food, and other essentials in emergency situations or areas with limited infrastructure. With the implementation of the Dynamic Airspace Connectivity API, these deliveries can be more efficient and secure.

EMERGENCY RESPONSE

TRANSPORT & LOGISTICS

Services: Location

In times of crisis, accessing information on population density can become a crucial tool. From dispatching rescue teams to coordinating relief operations, this type of data allows authorities to make better informed decisions. The Dynamic Airspace Connectivity Data API allows you to obtain dynamic data about mobile network coverage in a specific area and time, identifying "black volumes" to avoid the risk of losing control of the drone due to connectivity shortage. Authorities can then rely on this information to quickly assess the severity of the situation and allocate resources accordingly. This improves the efficiency of emergency response and mitigates the impact of disasters.

GETTING STARTED WITH DYNAMIC AIRSPACE CONNECTIVITY DATA API

01 **CHOOSE A CHANNEL PARTNER**
Select a suitable channel partner or payment aggregator that offers integration with the Open Gateway API to meet your needs and business goals.

02 **DEVELOPER REGISTRATION**
To use Open Gateway Products, you must undergo a registration process that includes signing up on both the Channel Partner and Operator platforms.

03 **DYNAMIC AIRSPACE CONNECTIVITY DATA API CONSUMPTION**
After subscribing and sharing credentials, you can access the Open Gateway Product on registered Operators, making API calls through the Channel Partner's gateway.

PRODUCT SPECIFICATIONS

AUTHORIZATION	OAuth scopes: airspace-connectivity-data-te:read
INPUT PARAMETERS	"serviceLevel": {}, "networkType": {}, "area": {}, "startDate": "2024-10-24T14:00:00Z", "endDate": "2024-10-24T15:00:00Z"

SERVICE RESPONSE	"geohash": "ezdqemf",
	 "layerThickness": 30.0,
	   "connectivityData": [
	      "geohash": "ezjqn1f",
	      "timeConnectivityData": [
	        "startTime": "2024-10-24T14:00:00Z",
	        "endTime": "2024-10-24T15:00:00Z",
	        "layerConnectivities": [
	          "NC",
	          "MC",
	          "MC",
	          "MC",
	          "MC",
	          "MC",
	          "MC",
	          "MC"

FURTHER INFORMATION

Join the **Telefónica Open Gateway Developer Hub** to test our API, develop use cases and improve user experiences.

If you are interested in the potential of Telefónica Open Gateway initiative and you are willing to collaborate with us, **access our Partner Program.**

For further questions about the initiative **contact our experts**.