location(name, latitude, longitude, altitude, protected\_area, batch)

**IC-1**: The *latitude* must be between -90 and 90

**IC-2**: The *longitude* must be between -180 and 180

**IC-3**: Each *name* must appear in at least one *location\_portugal*, *location\_spain* or *location\_gibraltar*

**IC-4**: Each *name* must appear only in *location\_portugal*, *location\_spain* or *location\_gibraltar*, but not in more than one at the same time

**IC-5**: The *protected\_area* may be empty

**IC-6**: The *batch* must be greater than or equal to 0

concelho(concelho, intermunicipal\_entity, district, region)

province(province, autonomous\_community)

municipio(municipio, province)

province: FK(province)

location\_portugal(name, parish, concelho)

concelho: FK(concelho)

location\_spain(name, municipio, province, district)

municipio, province: FK(municipio)

**IC-7**: The *district* may by empty

location\_gibraltar(name, major\_residential\_area)

comarca(municipio, comarca, province)

municipio, province: FK(municipio)

connection(location\_a, location\_b, means\_transport, distance, way, cardinal\_point, order\_a, order\_b)

location\_a: FK(location)

location\_b: FK(location)

**IC-8**: The *way* may be empty

**IC-9**: The *location\_a* and the *location\_b* must be different

**IC-10**: The order of *location\_a* and *location\_b* does not matter, i.e. for the same *means\_transport* two *locations* can only be associated with the same *connection* at most once

**IC-11**: The *distance* must be greater than or equal to 0

**IC-12**: The *order\_a* and the *order\_b* must be greater than 0

destination(location\_a, location\_b, means\_transport, starting\_point, destination)

location\_a, location\_b, means\_transport: FK(connection)

**IC-13**: The *starting\_point* may only have one out of 2 different values