

iGO Internal Format
Database specification in
ESRI SHAPE format



List of tables:

Network	1
Table Network	2
Table Junctions	6
Table Maneuvers	6
Administrative areas	7
Table Order0, Order1, Order7, Order8, Order9	7
Center of Settlements	7
Table COS	7
Points of Interest	8
Table POI	8
Built_up Areas	12
Table BUA	12
Waterways	12
Table Waterways	12
Railways	12
Table Railways	12
Land use and land cover	13
General table structure	13

iGO Internal Format
Database specification in
ESRI SHAPE format



Network

Table Network

Item Name	Full Name and Attribute Values	Type
ID	Unique road segment identification code	Number (11,0)
F_JUNC	From (Start) junction identification code	Number (11,0)
T_JUNC	To (End) junction identification code	Number (11,0)
FRC	Functional Road Class: <ul style="list-style-type: none"> • 1: Motorway • 2: Major roads of high importance • 3: Other major roads • 4: Secondary roads • 5.1: Local connecting roads • 5.2: Local roads of high importance • 6: Residential connecting roads • 7: Residential roads • 8: Other roads, usually not suitable for vehicle traffic, e.g. stairs, narrow walkways 	String(3)
FOW	Form of Way: <ul style="list-style-type: none"> • 1: Freeway • 2: Dual Carriage way • 3: Single Carriage way • 4: Roundabout • 5: Major Slip Road • 6: Parallel Road • 8: Entrance to/exit from a Car Park • 9: Small Slip Road • 11: Poor condition • 12: Unpaved • 13: Road in a pedestrian zone • 15: Service Road • 17: Special traffic figure • 18: Main and minor slip road 	Number (2,0)
ONEWAY	Direction of Traffic Flow <ul style="list-style-type: none"> • <blank>: Traffic is open in both directions (default) • FT: Traffic is open in positive direction • TF: Traffic is open in negative direction 	String (2)
STRUCTURE	Bridge/tunnel/ferry information <ul style="list-style-type: none"> • <blank>: default • B: Bridge (overpass) • T: Tunnel • F: Ferry connection 	String (1)
LENGTH	Length of the road segment in meters	Number (11,0)

iGO Internal Format

Database specification in ESRI SHAPE format



Item Name	Full Name and Attribute Values	Type																
TOLL	<p>Toll information</p> <ul style="list-style-type: none"> • F: No toll road (default) • T: Toll road • A: Special restriction (e.g. authorization required, permission needed) 	String (1)																
VTR	<p>Vehicle type restriction (restrict different vehicle types from routing)</p> <ul style="list-style-type: none"> • N: No vehicle type restriction • Y: Vehicle type restriction <p>The enumeration of vehicle positions within the string is as follows:</p> <table border="1"> <thead> <tr> <th>Character position</th> <th>Vehicle type</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Passenger cars</td> </tr> <tr> <td>2</td> <td>Truck</td> </tr> <tr> <td>3</td> <td>Taxi</td> </tr> <tr> <td>4</td> <td>Public bus</td> </tr> <tr> <td>5</td> <td>Residential vehicles</td> </tr> <tr> <td>6</td> <td>Bicycle</td> </tr> <tr> <td>7</td> <td>Pedestrian</td> </tr> </tbody> </table> <p>for example: NNNNNNN: no restriction (default) YYYNNNN: residential only YNNYNNN: not allowed for passenger cars and for public bus YYYYYYN: only for pedestrian allowed, e.g. Stairs, pedestrian zone. NNNNNYY: not allowed for bicycle and for pedestrian, e.g. on highways</p>	Character position	Vehicle type	1	Passenger cars	2	Truck	3	Taxi	4	Public bus	5	Residential vehicles	6	Bicycle	7	Pedestrian	String (7)
Character position	Vehicle type																	
1	Passenger cars																	
2	Truck																	
3	Taxi																	
4	Public bus																	
5	Residential vehicles																	
6	Bicycle																	
7	Pedestrian																	
SPD	Official speed limit on the road segment in km/h	Number (3,0)																
SPD_VALID	<p>Validation of the speed limit value</p> <ul style="list-style-type: none"> • 1: in case the speed limit is captured based on the traffic sign on field • 0: in case the speed limit is generated from the general traffic regulations (e.g. in or outside of the built-up area) 	Number (1,0)																
KPH	Calculated average speed on the road segment, ETA (estimated time of arrival) will be calculated based on this value	Number (3,0)																
PJ	<p>Plural Junction</p> <ul style="list-style-type: none"> • 1: plural junction • 0: no plural junction 	Number (1,0)																

iGO Internal Format

Database specification in ESRI SHAPE format



Item Name	Full Name and Attribute Values	Type
F_LEVEL	<p>Begin Z level</p> <ul style="list-style-type: none"> • 0: Ground Z level (default) • 1: Overpass • -1: Underpass <p>the different values represent different physical levels, only edges on the same level are connected physically not used for spaghetti model</p>	Number (1,0)
T_LEVEL	<p>End Z level</p> <ul style="list-style-type: none"> • 0: Ground Z level (default) • 1: Overpass • -1: Underpass <p>the different values represent different physical levels, only edges on the same level are connected physically not used for spaghetti model</p>	Number (1,0)
NAME	Official name of the street	String (70)
NAMETYP	Official type/suffix of the street name (e.g. street, avenue, square on the original language of the country, if officially used)	String (30)
ROUTENUM	Official route number of the road	String (10)
I_ROUTENUM	International route number of the road (e.g. E45, E60)	String (10)
L_SCHEME	<p>Left house numbering scheme (structure)</p> <ul style="list-style-type: none"> • E: Even house number structure • O: Odd house number structure • M: Mixed house number structure • <blank>: no house number 	String (1)
FROMLEFT	Left first house number	Number (6,0)
TOLEFT	Left last house number	Number (6,0)
R_SCHEME	<p>Right house numbering scheme (structure)</p> <ul style="list-style-type: none"> • E: Even house number structure • O: Odd house number structure • M: Mixed house number structure • <blank>: no house number 	String (1)
FROMRIGHT	Right first house number	Number (6,0)
TORIGHT	Right last house number	Number (6,0)
L_ORDER8	The standard name of the Order8 administrative area the left side of the edge belongs to. Optional, not used for indexing	String (70)
R_ORDER8	The standard name of the Order8 administrative area the right side of the edge belongs to. Optional, not used for indexing	String (70)

iGO Internal Format

Database specification in ESRI SHAPE format



Item Name	Full Name and Attribute Values	Type
L_ORDER9	The standard name of the Order9 administrative area the left side of the edge belongs to, or empty Optional, not used for indexing	String (70)
R_ORDER9	The standard name of the Order9 administrative area the right side of the edge belongs to, or empty Optional, not used for indexing	String (70)
L_ADMINID	Left lowest administrative area code, links to the ID of the lowest administrative area table. Used for indexing of the road segment	Number (11,0)
R_ADMINID	Right lowest administrative area code, links to the ID of the lowest administrative area table. Used for indexing of the road segment	Number (11,0)
L_POSTCODE	Left postal code (left ZIP code)	String (10)
R_POSTCODE	Right postal code (right ZIP code)	String (10)
U_TURN	Restriction of U-turn maneuvers on the edge <ul style="list-style-type: none"> • T: (true) U-turn permitted (default) • F: (false) U-turn prohibited 	String(1)
BUA	Road segment belonging to built-up area <ul style="list-style-type: none"> • 0: outside of the built-up area • 1: within the built-up area 	Number (1,0)

iGO Internal Format
Database specification in
ESRI SHAPE format



Table Junctions

Item Name	Full Name and Attribute Values	Type
ID	Unique junction identification code	Number (11,0)
TYPE	The special conditions applying to the junction: <ul style="list-style-type: none"> • 0: Normal network junction • 1: Blocked passage, passing through this junction is prohibited by a physical barrier • 2: Database border • 3: GSC (Grade Separated Crossing) 	Number (1,0)

Table Maneuvers

Item Name	Full Name and Attribute Values	Type
ID	Unique maneuver identification code	Number (11,0)
F_EDGE	Road segment identification code (starting link of the maneuver)	Number (11,0)
JUNCTION	Junction identification code	Number (11,0)
T_EDGE	Road segment identification code (ending link of the maneuver)	Number (11,0)
TYPE	Type of the maneuver <ul style="list-style-type: none"> • 1: Prohibited maneuver • 2: Multi lane bifurcation • 3: Priority maneuver • 4: Restricted maneuver (internal use only) • 5: Simple fork bifurcation • 6: Exit bifurcation 	Number (1,0)

iGO Internal Format

Database specification in ESRI SHAPE format



Administrative areas

Order0 – country
 Order1 – county, region, etc.
 Order7 – small region, province, etc. (optional)
 Order8 – municipality (the most important administrative area for indexing the streets)
 Order9 – sub-municipality, district, etc.

Table Order0, Order1, Order7, Order8, Order9

Item Name	Full Name and Attribute Values	Type
ID	Unique administrative area identification code	Number (11,0)
NAME	Official name of the administrative area	String(70)
PARENTID	Identification code of the parent administrative area (ID of the one upper administrative area that the administrative area belongs to)	Number (11,0)

Center of Settlements

Table COS

Item Name	Full Name and Attribute Values	Type
ID	Center of Settlement identification code	Number (11,0)
NAME	Official name of the Settlement	String(70)
POSTCODE	Postal code of the Settlement	String(10)
POP	Number of resident population	Number (11,0)
DISP_CLASS	Center of Settlement display class <ul style="list-style-type: none"> • 2: capital of country • 4: inhabitants >= 1.000.000 • 5: inhabitants within 500.000 – 999.999 • 7: inhabitants within 100.000 – 499.999 • 8: inhabitants within 50.000 – 99.999 • 10: inhabitants within 10.000 – 49.999 • 11: inhabitants < 10.000 • 12: all other settlements 	Number (2,0)
ADMINID	Identification code of the lowest administrative area to which the Center of Settlements belongs	Number (11,0)
CONADMINID	Identification code of the administrative area to which the Center of Settlement belongs as a center point	Number (11,0)

iGO Internal Format

Database specification in ESRI SHAPE format



Points of Interest

Table POI

Item Name	Full Name and Attribute Values	Type
ID	Points of Interest identification code	Number (11,0)
NAME	Official name of the Points of Interest	String(70)
BRANDNAME	Official brand name of the Points of Interest	String(30)
TYPE	Main categories	String(30)
SUBTYPE	Sub-categories	String(30)
CITYNAME	Place name (not used for indexing)	String(70)
STNAME	Official street name	String(70)
STTYPE	Official type/suffix of the street name	String(30)
HSNUM	House number	String(10)
POSTCODE	Postal code (ZIP code)	String(10)
TELNUM	Telephone number	String(20)
EMAIL	E-Mail address	String(30)
HTTP	Internet address	String(70)
ADMINID	Identification code of the lowest administrative area to which the Points of Interest belongs. Index will be created based on this field.	Number (11,0)

The following POI categories are used in the iGO internal format:

TYPE	SUBTYPE
Services	Petrol_Station
Services	Car_Dealer
Services	Car_Repair
Services	Rent-a-Car
Services	Car_Wash
Services	Repair_Facility
Services	Automobile_Club
Services	Tourist_Information_Office
Services	Post_Office
Services	Pharmacy
Services	Cash_Dispenser
Services	Bank
Services	Communication
Services	Restroom
Services	Truck_Stop
Services	Marina
Services	Wrecker_Service
Services	Company
Services	Utility
Services	Personal_Service
Services	Business_Service
Services	Social_Service
Services	General
Transportation	Airline_Access
Transportation	Airport
Transportation	Ferry_Terminal
Transportation	Railway_Station

iGO Internal Format

Database specification in ESRI SHAPE format



TYPE	SUBTYPE
Transportation	Bus_Station
Transportation	Parking
Transportation	Rest_Area
Transportation	Ground_Transport
Transportation	Harbour
Transportation	General
Shopping	Shopping_Centre
Shopping	Department_Store
Shopping	Grocery
Shopping	Convenience
Shopping	Apparel
Shopping	House_and_Garden
Shopping	Home_Furnishing
Shopping	Computer/Software
Shopping	General_Merchandiser
Shopping	Special_Retail
Shopping	Shop
Shopping	Drive-through_Bottle_Shop
Shopping	General
Entertainment	Amusement_Park
Entertainment	Zoo
Entertainment	Cinema
Entertainment	Casino
Entertainment	Night_Life
Entertainment	Bar
Entertainment	Music_Centre
Entertainment	Important_Tourist_Attraction
Entertainment	General
Culture	Museum
Culture	Opera
Culture	Theatre
Culture	Library
Culture	Concert_Hall
Culture	Cultural_Centre
Culture	Exhibition_Centre
Culture	Convention_Centre
Culture	Place_of_Worship
Culture	College_University
Culture	School
Culture	General
Sports_Recreation	Golf_Course
Sports_Recreation	Bowling
Sports_Recreation	Ice_Skating_Rink
Sports_Recreation	Skiing_Center
Sports_Recreation	Swimming_Pool
Sports_Recreation	Tennis_Court
Sports_Recreation	Water_Sports
Sports_Recreation	Sports_Centre
Sports_Recreation	Stadium
Sports_Recreation	Beach
Sports_Recreation	Yacht_Basin
Sports_Recreation	Fish
Sports_Recreation	Boat_Ramp
Sports_Recreation	Picnic_Area
Sports_Recreation	Geocaching
Sports_Recreation	Racetrack
Sports_Recreation	Park_and_Recreation_Centre
Sports_Recreation	General

iGO Internal Format

Database specification in ESRI SHAPE format



TYPE	SUBTYPE
Emergency_Government	Hospital/Polyclinic
Emergency_Government	Doctor
Emergency_Government	Dentist
Emergency_Government	Veterinarian
Emergency_Government	Police_Station
Emergency_Government	Frontier_Crossing
Emergency_Government	Embassy
Emergency_Government	Courthouse
Emergency_Government	Government_Office
Emergency_Government	First_Aid
Emergency_Government	Fire_Brigade
Emergency_Government	Prison
Emergency_Government	General
Food_Drink	Restaurant_American
Food_Drink	Restaurant_Asian
Food_Drink	Restaurant_Barbecue
Food_Drink	Restaurant_Chinese
Food_Drink	Restaurant_Italian
Food_Drink	Restaurant_Mexican
Food_Drink	Restaurant_Sea_Food
Food_Drink	Restaurant_Steak_Grill
Food_Drink	Restaurant_Pizza
Food_Drink	Restaurant_French
Food_Drink	Restaurant_German
Food_Drink	Restaurant_British
Food_Drink	Restaurant_International
Food_Drink	Restaurant_Other
Food_Drink	Deli/Bakery_
Food_Drink	Fast_Food
Food_Drink	Bagel_Donut_
Food_Drink	Cafe_Diner_
Food_Drink	Restaurant_Area
Food_Drink	Winery
Lodging	Hotel_or_Motel
Lodging	Bed&Breakfast_inn
Lodging	Camping_RV-Park
Lodging	Resort
Artificial_Landmark	Bridge
Artificial_Landmark	Building
Artificial_Landmark	Cemetery
Artificial_Landmark	Dam
Artificial_Landmark	Levee
Artificial_Landmark	Locale
Artificial_Landmark	Military
Artificial_Landmark	Mine
Artificial_Landmark	Oil_Field
Artificial_Landmark	Tower
Artificial_Landmark	Trail
Artificial_Landmark	Tunnel
Artificial_Landmark	Drink_water
Artificial_Landmark	Ghost_Town_
Artificial_Landmark	Subdivision
Artificial_Landmark	General
Natural_Landmark	Scenic/Panoramic_View
Natural_Landmark	Hot_Spring
Natural_Landmark	Beach
Natural_Landmark	Camping_Ground
Natural_Landmark	Mountain_Pass

iGO Internal Format

Database specification in ESRI SHAPE format



TYPE	SUBTYPE
Natural_Landmark	Mountain_Peak
Natural_Landmark	Arch
Natural_Landmark	Area
Natural_Landmark	Basin
Natural_Landmark	Bench
Natural_Landmark	Cape
Natural_Landmark	Cliff
Natural_Landmark	Crater
Natural_Landmark	Flat
Natural_Landmark	Forest
Natural_Landmark	Gap
Natural_Landmark	Gut
Natural_Landmark	Isthmus
Natural_Landmark	Lava
Natural_Landmark	Pillar
Natural_Landmark	Plain
Natural_Landmark	Range
Natural_Landmark	Reserve
Natural_Landmark	Ridge
Natural_Landmark	Rock
Natural_Landmark	Slope
Natural_Landmark	Summit
Natural_Landmark	Valley
Natural_Landmark	Woods
Natural_Landmark	General
Water_landmark	Arroyo
Water_landmark	Sand_Bar
Water_landmark	Bay
Water_landmark	Bend
Water_landmark	Canal
Water_landmark	Channel
Water_landmark	Cove
Water_landmark	Falls
Water_landmark	Geyser
Water_landmark	Glacier
Water_landmark	Harbour
Water_landmark	Island
Water_landmark	Lake
Water_landmark	Rapids
Water_landmark	Reservoir
Water_landmark	Sea
Water_landmark	Spring
Water_landmark	Stream
Water_landmark	Swamp
Water_landmark	General

iGO Internal Format
Database specification in
ESRI SHAPE format



Built_up Areas

Table BUA

Item Name	Full Name and Attribute Values	Type
ID	Built-up area identification code	Number (11,0)
NAME	Official name of the built-up area	String(70)
DISP_CLASS	Built-up area display class <ul style="list-style-type: none"> • 1: inhabitants >= 1.000.000 • 2: inhabitants with 100.000 – 999.999 • 3: inhabitants with 50.000 – 99.999 • 4: inhabitants with 5.000 – 49.999 • 5: inhabitants < 4.999 	Number (1,0)

Waterways

Table Waterways_polygon, Waterways_polyline

Item Name	Full Name and Attribute Values	Type
ID	Identification code	Number (11,0)
NAME	Official name of the water element	String(70)
TYPE	<ul style="list-style-type: none"> • River • Lake • Sea 	String(10)
DISP_CLASS	Water element display class <ul style="list-style-type: none"> • 1..5: 1(highest)..5(lowest) 	Number (1,0)

Railways

Table Railways

Item Name	Full Name and Attribute Values	Type
ID	Identification code	Number (11,0)
NAME	Official name of the railways (optional)	String(70)
DISP_CLASS	Water element display class <ul style="list-style-type: none"> • 1: Main railways • 2: Local railways 	Number (1,0)

iGO Internal Format

Database specification in ESRI SHAPE format



Land use and land cover

Following features are used in the iGO internal format:

- airport
- airport runway
- building
- cemetery
- industrial area
- national park
- city park
- regional park
- woods

General table structure

Item Name	Full Name and Attribute Values	Type
ID	Identification code	Number (11,0)
NAME	Name (optional)	String(70)