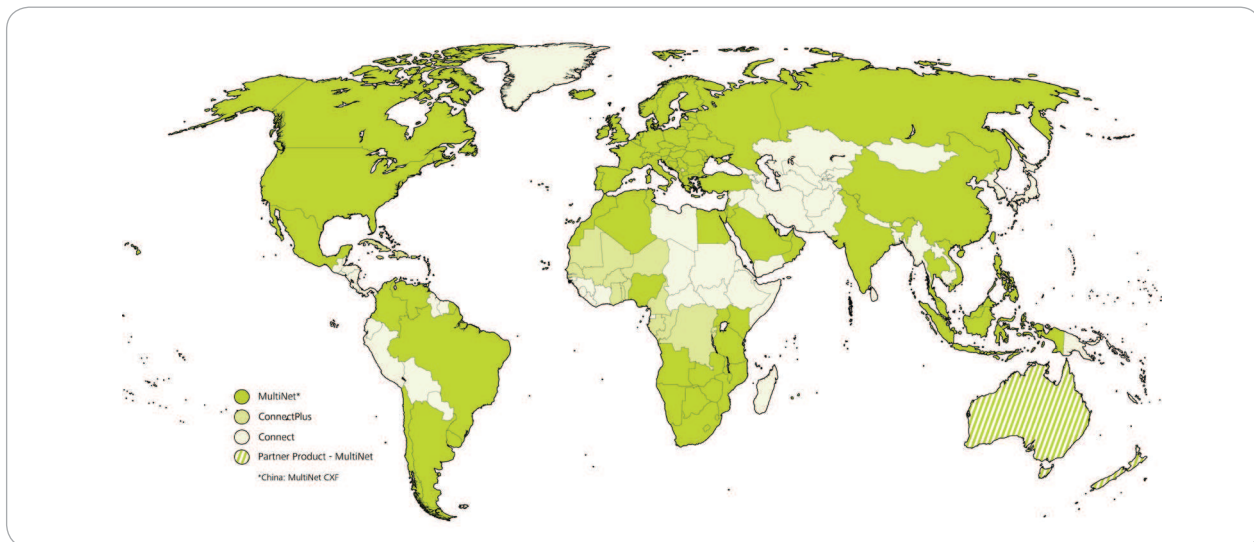


# COVERAGE

## MULTINET, CONNECTPLUS AND CONNECT

### I. INTRODUCTION TO MULTINET, CONNECTPLUS AND CONNECT

TomTom meets the varied needs of its customers with distinct digital map products: MultiNet, ConnectPlus and Connect.



For more than 20 years, TomTom has been creating the world’s most extensive digital mapping database. In the past, TomTom created, archived, and deployed data country-by-country. Today’s enterprise and navigation application providers demand seamless global coverage.

This history of mapping the developed world culminates with MultiNet the richest, freshest, and most accurate digital mapping product available. With quarterly updates, MultiNet features the highest quality, most accurate, most complete data available. As of the first quarter of 2014, TomTom provides navigable road coverage spanning over 42 million kilometers across 116 countries, extending coverage to 4 billion people worldwide.

Before data can be incorporated into the MultiNet database, it must meet a rigorous standard for accuracy and completeness. Getting data to meet this standard takes time, and TomTom has spent the last 20 years building this market-leading database.

While MultiNet covers a significant portion of the globe, certain geographies have yet to be incorporated into this top-tier database. Many application providers have an urgent need for data in every corner of the world. ConnectPlus and Connect fill these needs by expanding TomTom coverage at the rapid pace the market demands.

Emerging markets are hungry for technology and solutions with a fast time-to-market. Waiting years to completely build countrywide data is not an option in the rapidly developing world. ConnectPlus and Connect are critical for navigation and LBS providers to serve that market.

ConnectPlus and Connect expand TomTom’s global footprint with one-stop convenience and easy, one-step compilation. One day the entire planet will be covered with the richness and level of detail present with MultiNet. Until that time, ConnectPlus and Connect provide an effective solution for a single, global digital map.

With MultiNet, ConnectPlus, and Connect, TomTom has innovated distinct types of digital map products to balance the demand for expanded geographic coverage with stringent quality standards. For increased customer convenience, all products are available in GDF-AS, GDF-AR, Shapefile, and Oracle Spatial formats. The result is a single, global digital map solution.

**MULTINET IS THE PREMIER MAP DATABASE FOR ALL APPLICATIONS.**

MultiNet is used by TomTom’s customers in all markets. MultiNet is the premier platform for the industry’s freshest, richest, and most accurate data, built to rigorous standards by the experts at TomTom. MultiNet supports all segments ranging from navigation to enterprise.

**CONNECTPLUS WAS CREATED TO MEET MARKET DEMAND FOR NAVIGABLE COVERAGE IN NEW GEOGRAPHIES, WITH AN EMPHASIS ON RAPID TIME-TO-MARKET.**

ConnectPlus has navigable functionality suitable for the PNAV market and the entry-level automotive market. While it contains fewer features than MultiNet, ConnectPlus has basic structural quality guarantees for easy compilation alongside MultiNet.

**CONNECT PROVIDES GLOBAL COVERAGE IN TOMTOM FORMATS AND SUPPORTS BASIC ROUTING AND DISPLAY FUNCTIONALITIES.**

Connect enables basic routing and display functionality, which makes it ideal for Internet, wireless, and enterprise applications in geographies where MultiNet and ConnectPlus are not available. Connect is linked to TomTom navigable coverage for seamless, cross-border routing.

**II. DEFINING ROAD NETWORK TYPES IN MULTINET**

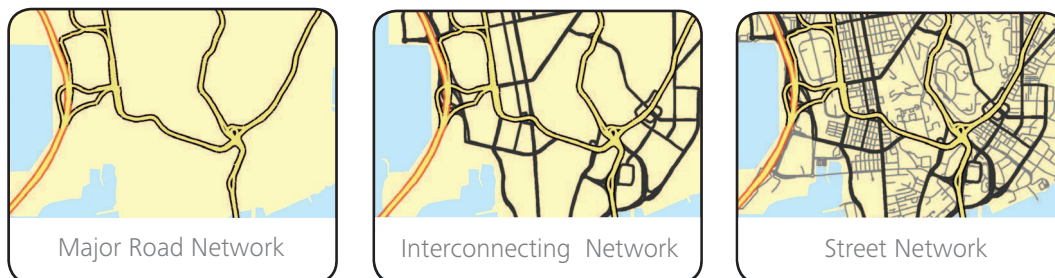
The road network is divided into three classes according to the size and function of carriageway: Major Roads, Interconnecting Roads, and Streets. Each classification is a subset of the adjacent group; the three groups are not distinct.

The largest and most heavily used roads comprise the Major Road Network (MRNW). This covers freeways, motorways, and limited access highways. The Interconnecting Network (ICNW) includes all MRNW as well as connecting roads of high and medium importance. Street Network (STNW) encompasses the entire road network, including local roads and destination roads, as well as ICNW and MRNW.

Streets are attributed as FA or BA to signify if they are “Fully Attributed” or “Basic Attributed”. The difference between FA and BA attributed roads is the level of quality attained for features and attributes, which determines the navigability of the map data. Basic Attributed means that all streets are captured, but may not be completely attributed. The most important roads are populated with the key features and attributes relevant for navigation and routing. However,

less important roads may not comply with all requirements of demanding, high-end applications. Basic Attributed map data is considered suitable for navigation with personal navigation devices, wireless devices, and Internet applications.

**KOWLOON, HONG KONG**



Fully Attributed means that all streets are captured and are completely attributed per profile description. This map data is suitable for the most demanding high-end applications, such as turn-by-turn navigation and traffic telematics. The completeness and quality of the network geometry and the key “navigation” attributes (maneuver information, direction of traffic flow, etc.) are required to reach this high level of correctness. Certain threshold values are set as targets for these and other features.

Not all roads fit these descriptions, which creates several miscellaneous road types. Connector Roads are a special type of road in the MultiNet database. Connector Roads have been field surveyed and are fully attributed, but a country with Connector Roads will only include roads that would be classified as Major Roads. Another exception is “No Profile Roads.” These roads are used in developing countries only, and have attribution quality below BA. LDM (low-density map) roads are a specific type of No Profile roads particular to Russia.

The terms described above are represented in all products using the Processing Status attribute (2S) as follows:

- Value 1:** Fully Attributed
- Value 2:** Basic Attributed
- Value 7:** Navigable (applies only to ConnectPlus)
- Value 8:** Non-Navigable (applies only to Connect)
- Value 9:** Incompletely Attributed (No Profile)

Fully Attributed, Basic Attributed, and No Profile attributes are applied at the local administrative boundary level by road class. For further detail, please consult the relevant product specification documentation.

### III. CONNECTPLUS: NAVIGABLE COVERAGE IN MORE AREAS, NOW

ConnectPlus was created in response to growing demand for navigable coverage in key geographic regions such as Africa, South America, and Asia Pacific. ConnectPlus has a flexible specification that delivers a usable navigation product with an accelerated time-to-market.

ConnectPlus comprises a specification that depends on the sources used for each specific country. The necessary data for application developers to create a usable navigation product is included. Data completeness and data accuracy guarantees that are integral to MultiNet only partially apply with ConnectPlus.

ConnectPlus supports basic mapping, routing and navigation functions, and allows cross-border routing to link the ConnectPlus road network to the MultiNet database. This seamless integration gives developers an easier way of delivering navigation solutions that offer more complete global coverage. In this way, TomTom makes it easy for its partners to compile the data into their end product formats.

ConnectPlus offers an extension of usable navigation coverage to partners who want to address new markets as quickly as possible without having to wait for the richer and more complete coverage included in MultiNet. The end result is more coverage for more people in more regions reachable with TomTom navigable digital mapping data.

### IV. CONNECT: BASIC MAPPING AND ROUTING ACROSS THE GLOBE

Connect is our single, seamless global solution for applications that support mapping and basic routing. When combined with MultiNet and ConnectPlus, we cover more than 200 countries and territories worldwide. Connect was first released in July of 2007 with more than 170 countries; subsequent releases contain fewer countries because many have migrated into the more advanced MultiNet platform.

The Connect product is created once per calendar year. As Connect already covers the entire globe, no new countries will be added to the product. Rather, as digital map data matures regionally, many countries will leave the Connect format and advance to ConnectPlus or MultiNet.

Connect provides digital map data in areas such as Latin America, Africa and Asia to help businesses make sound decisions and help people get to their destination. With data for more than 42 million kilometers of roadways around the globe, Connect is the ideal conduit to reach emerging markets around the world for mapping, routing, and other location-based services. A complete list of countries covered by Connect data is available in the appendix.

Connect supports basic mapping and routing functionality, and enables cross-border routing to link with the MultiNet database. This seamless integration gives developers the means to more easily deliver mapping solutions that offer a more complete global coverage. Also, the standard format allows for easier compilation into a user's runtime format. The end result is more coverage for more people in more regions reachable with TomTom digital mapping data.

## V. APPROPRIATE MARKETS FOR MULTINET, CONNECTPLUS AND CONNECT

With MultiNet, ConnectPlus and Connect, TomTom meets the different needs of its customers with different products, each suitable for its part of the world.

MultiNet is the database of choice for application providers operating in the highly developed countries in which it is available. ConnectPlus provides a bridge to rapidly deliver navigable coverage for certain high-demand countries, and Connect provides basic map coverage for every remaining corner of the globe.

TomTom delivers the digital maps and dynamic content that power some of the world’s most essential navigation and location-based services. Interested parties can visit [www.tomtom.com/licensing](http://www.tomtom.com/licensing) to learn more. Contact information for sales representatives is available by geography, along with other resources.

	MULTINET	CONNECTPLUS	CONNECT
<b>Markets</b>			
Automotive	✓		
Personal Navigation	✓	✓	
Internet & Wireless	✓	✓	✓
Enterprise	✓	✓	✓
<b>Functionality</b>			
Turn-by-turn Navigation	✓		
Basic Navigation	✓	✓	
Routing and Display	✓	✓	✓
Geocoding	✓	✓	✓

## VI. TOMTOM COVERAGE BY COUNTRY

COUNTRY	Q1 2014
Afghanistan	Connect
Åland Islands	Connect
Albania	MultiNet
Algeria	MultiNet
American Samoa	Connect
Andorra	MultiNet
Angola	MultiNet
Anguilla	ConnectPlus
Antartica	Connect
Antigua and Barbuda	ConnectPlus
Argentina	MultiNet
Armenia	Connect
Aruba	ConnectPlus
Australia	Partner product
Austria	MultiNet
Azerbaijan	Connect
Bahamas	ConnectPlus
Bahrain	MultiNet
Balearic Islands	MultiNet
Bangladesh	Connect
Barbados	ConnectPlus
Belarus	MultiNet
Belgium	MultiNet
Belize	Connect
Benin	ConnectPlus
Bermuda	ConnectPlus
Bhutan	Connect
Bolivia	Connect
Bonaire, Saba and Sint Eustatius	ConnectPlus
Bosnia-Herzegovina	MultiNet
Botswana	MultiNet
Bouvet Island	Connect
Brazil	MultiNet
British Indian Ocean Territory	Connect
British Virgin Islands	ConnectPlus
Brunei Darussalam	MultiNet
Bulgaria	MultiNet
Burkina Faso	ConnectPlus
Burundi	ConnectPlus
Cambodia	Connect
Cameroon	ConnectPlus

COUNTRY	Q1 2014
Canary Islands	MultiNet
Cape Verde	Connect
Cayman Islands	ConnectPlus
Central African Republic	Connect
Chad	Connect
Channel Islands	MultiNet
Chile	MultiNet
China	Partner product
Christmas Island	Connect
Clipperton Island (France)	Connect
Cocos (Keeling) Islands	Connect
Colombia	MultiNet
Comoros	Connect
Congo	ConnectPlus
Cook Islands	Connect
Costa Rica	Connect
Cote d'Ivoire	Connect
Croatia	MultiNet
Cuba	ConnectPlus
Curaçao	ConnectPlus
Cyprus	MultiNet
Czech Republic	MultiNet
Democratic Republic of the Congo	ConnectPlus
Denmark	MultiNet
Djibouti	Connect
Dominica	ConnectPlus
Ecuador	Connect
Egypt	MultiNet
Equatorial Guinea	Connect
Eritrea	Connect
Estonia	MultiNet
Ethiopia	Connect
Faroe Islands	Connect
Falkland Islands (Malvinas)	Connect
Fiji	Connect
Finland	MultiNet
France	MultiNet
French Guiana	MultiNet
French Polynesia	Connect
French Southern and Antarctic Lands	Connect
Gabon	ConnectPlus

COUNTRY	Q1 2014
Gambia	Connect
Georgia	Connect
Germany	MultiNet
Ghana	ConnectPlus
Gibraltar	MultiNet
Greece	MultiNet
Grenada	ConnectPlus
Guadeloupe	MultiNet
Guam	MultiNet
Guatemala	Connect
Guinea	Connect
Guinea-Bissau	Connect
Guyana	Connect
Heard and McDonald Islands	Connect
Honduras	Connect
Hong Kong Special Administrative Region of China	MultiNet
Hungary	MultiNet
Iceland	MultiNet
India	MultiNet
Indonesia	MultiNet
Iran	Connect
Iraq	Connect
Ireland	MultiNet
Isle of Man	MultiNet
Italy	MultiNet
Japan	Partner product
Jordan	MultiNet
Kazakhstan	Connect
Kenya	MultiNet
Kiribati	Connect
Korea, Democratic People's Republic of (North)	Connect
Korea, Republic of (South)	Connect
Kosovo	Connect
Kuwait	MultiNet
Kyrgyzstan	Connect
Lao People's Democratic Republic	Connect
Latvia	MultiNet

COUNTRY	Q1 2014
Lesotho	MultiNet
Liberia	Connect
Libyan Arab Jamahiriya	Connect
Lithuania	MultiNet
Macao Special Administrative Region of China	MultiNet
Macedonia	MultiNet
Madagascar	Connect
Malawi	MultiNet
Malaysia	MultiNet
Maldives	Connect
Mali	ConnectPlus
Marshall Islands	Connect
Martinique	MultiNet
Mauritania	ConnectPlus
Mauritius	MultiNet
Mayotte	MultiNet
Micronesia, Federated States of	Connect
Moldova	MultiNet
Mongolia	Connect
Montenegro	MultiNet
Montserrat	ConnectPlus
Morocco	MultiNet
Mozambique	MultiNet
Myanmar	Connect
Namibia	MultiNet
Nauru	Connect
Nepal	Connect
Netherlands Antilles	MultiNet
New Caledonia	Connect
New Zealand	Partner product
Nicaragua	Connect
Niger	ConnectPlus
Nigeria	MultiNet
Niue	Connect
Norfolk Island	Connect
Northern Mariana Islands	Connect
Oman	MultiNet
Pakistan	Connect
Palau	Connect
Panama	Connect
Papua New Guinea	Connect
Paraguay	Connect

COUNTRY	Q1 2014
Peru	Connect
Philippines	MultiNet
Pitcairn	Connect
Poland	MultiNet
Puerto Rico	MultiNet
Qatar	MultiNet
Romania	MultiNet
Russian Federation	MultiNet
Rwanda	ConnectPlus
Saint Kitts and Nevis	ConnectPlus
Saint Lucia	ConnectPlus
Saint Martin (French part)	MultiNet
Saint Pierre and Miquelon	Connect
Saint Vincent and the Grenadines	ConnectPlus
Saint-Barthélemy	MultiNet
Saint-Helena	Connect
Samoa	Connect
São Tomé and Príncipe	Connect
Senegal	ConnectPlus
Serbia	MultiNet
Seychelles	Connect
Sierra Leone	Connect
Singapore	MultiNet
Slovakia	MultiNet
Slovenia	MultiNet
Solomon Islands	Connect
Somalia	Connect
South Africa	MultiNet
South Georgia and the South Sandwich Islands	Connect
South Sudan	Connect
Sri Lanka	Connect
Sudan	Connect
Suriname	Connect
Swaziland	MultiNet
Taiwan (Republic of China)	MultiNet
Tajikistan	Connect
Tanzania	MultiNet
Thailand	MultiNet
Timor-Leste	Connect
Togo	ConnectPlus
Tokelau	Connect
Tonga	Connect
Trinidad and Tobago	ConnectPlus

COUNTRY	Q1 2014
Tunisia	MultiNet
Turkey	MultiNet
Turkmenistan	Connect
Turks and Caicos Islands	ConnectPlus
Tuvalu	Connect
Uganda	MultiNet
Ukraine	MultiNet
United Arab Emirates	MultiNet
United States	MultiNet
United States Minor Outlying Islands	Connect
Uruguay	MultiNet
Uzbekistan	Connect
Vanuatu	Connect
Venezuela (Bolivarian Republic of)	MultiNet
Vietnam	MultiNet
Wallis and Futuna Islands	Connect
Western Sahara	MultiNet
Zambia	MultiNet
Zimbabwe	MultiNet