Since its founding more than two decades ago, Tele Atlas® has fueled, promoted, and helped its partners capitalize on industry growth and change. We’ve provided unmatched support for the digital mapping industry’s evolution from a government population-tracking tool to a useful application in business, Internet, wireless, in-car, and personal navigation. We have more than 20 years of industry firsts to our credit — from the development of one of the world’s first in-vehicle navigation systems to the 3D models that now enhance our database and our partners’ products. Tele Atlas also launched the first navigable digital road map of Europe; introduced the most powerful turn-by-turn map database of North America ever built; and developed Mobile Mapping, our exclusive data capture technology. This spirit of innovation has helped us deliver the freshest, richest, and most accurate and comprehensive digital map data to our partners more quickly than our competitors, and has enabled those partners to bring powerful applications to market faster and more efficiently than ever before.

Today, technological innovations, including smaller GPS chips and better displays, are changing the market’s focus from pure navigation to location-based services (LBS) that can be deployed in personal and automotive navigation systems, smartphones, and other mobile devices. Tele Atlas is better positioned than any other map data provider to help developers extend the “guide-oriented” capabilities of traditional maps to support a “find-centric” view of the world that creates an even greater degree of possibility, community, and discovery for consumers. In addition to the innovative products we already provide, including dynamic data, voice-enabled maps, and an ever-expanding library of more than 20 million unique points of interest (POIs), Tele Atlas is working to help our partners deliver powerful next-generation solutions to their customers. From Advanced Driver Assistance Systems (ADAS) that will make driving safer and more efficient, to capabilities such as online data access and pedestrian navigation, Tele Atlas continues to extend the convenience and quality of digital maps.

A Legacy of Leadership

Tele Atlas offers more than 20 million points of interest worldwide.
Tele Atlas has done more than any other map data provider to extend the functionality and accessibility of digital maps, and to give solution providers opportunities to differentiate their products and improve the way their customers explore the world. From real-time weather and traffic information to precisely positioned address points and intuitive displays, Tele Atlas data enables solutions that are relevant to consumers’ daily lives, with innovative products that include:

• 3D imagery — Tele Atlas is the first digital map data provider to add 3D landmarks, 3D city models, and 3D terrain models to its database, giving consumers a more realistic view of their surroundings and improving their ability to orient themselves in unfamiliar environments.

• 2D city maps — We offer users a more lifelike digital mapping experience by incorporating into our database satellite and aerial imagery, as well as detailed two-dimensional representations of their surroundings, including building footprints, town blocks, and railway infrastructures.

• Voice-enabled maps — Tele Atlas' phoneme products are the most comprehensive and precise on the market, ensuring the recognition of virtually all variants in end-user pronunciation, and delivering the clearest, most useful vocal instruction available. We cover a range of European and North American languages, and deliver the highest level of navigation and location-based detail available, including street and sign names and a wide range of POIs.

• Address points — We have developed the industry’s most accurate method for pinpointing addresses to their exact position on a map, increasing users’ ability to identify the precise location of destinations and other POIs. Unlike traditionally geocoded addresses, address points can be linked directly to our underlying map and positioned without computational error. The result is an unprecedented ability to direct users to property parcels — and even buildings within the parcel.

• Points of Interest — Tele Atlas offers more than 20 million points of interest worldwide, more than any other digital map data provider. Our POIs offer a matchless level of accuracy, detail, and convenience, and can be organized by type, proximities, and brand, giving end users improved access to their preferred shops, hotels, restaurants, and other products and services.

• Tele Atlas® ContentLink™ — the only program of its kind, ContentLink is a Web-based service that links qualified application developers with providers of unique POIs and other location-based content, and provides the technologies both parties need to improve the quality and marketability of their products.

• Truck attributes — Tele Atlas offers the industry’s most comprehensive dataset for fleet owners and operators of large trucks and other road-restricted vehicles. We currently provide truck-specific attributes, such as road height limits and weight restrictions, for the major road networks and local and access roads. Whether supporting homeland security efforts or on-time product delivery, Tele Atlas’ truck attribute information is an invaluable resource for government agencies and enterprises alike.

• Locality Index — Our real-world locality content brings a new level of intuitiveness to navigation, allowing developers to build applications that guide users to their destinations while avoiding the complexities of modern address systems. By prioritizing localities from administrative, postal, and other locality sources for each map feature, Tele Atlas’ content enables users to easily locate the street address they need — no matter how many street names match that destination — using information they know and understand.
A Superior Map Update Process

Unlike other map data providers, Tele Atlas utilizes a fleet of survey vehicles, including our cutting-edge Mobile Mapping Vans, to collect detailed road information, and then supports that data with information from a global network of authoritative resources. Our methods are the industry’s most innovative, efficient, and cost-effective way to collect and verify detailed road information.

No other digital map company utilizes vehicles that match the capabilities of Tele Atlas’ Mobile Mapping Vans. Our vans accurately capture digital road information up to five times faster than traditional methods — while driving at posted speed limits. They are the first to fully capture and integrate a multidimensional view of the road — including details such as road signs, turn restrictions, and lane count information, as well as images of streets, storefronts, and complex intersections — with an absolute geometric accuracy of two meters. Current research in automatic object recognition will soon enable us to capture these road details even more quickly and efficiently.

Yet even with the advantages of Mobile Mapping technology, driving millions of kilometers of roadway every year is not enough to keep pace with changes occurring throughout the global road network. That’s why Tele Atlas utilizes the world’s largest network of reliable resources — more than 50,000 worldwide — to back up the information we capture with our vehicles, and to anticipate changes, such as housing developments and road projects, before they occur.

Tele Atlas also has a committed community of partners and end users who contribute to the quality of our maps through the Map Insight™ program. Map Insight is an innovative, Web-based tool that enables partners and consumers to quickly and easily communicate directly to us changes they observe on the road. The program provides an invaluable tool for gathering changes and increasing the satisfaction of map application users.
A Vision for Tomorrow

Tele Atlas is well prepared to meet our partners’ needs and their consumers’ demands, now and in the future. We devote millions of euros and dollars annually to laboratory- and field-based efforts that produce methods for enhancing the value and convenience of digital maps, and create opportunities for our partners to enhance and extend their product offerings. We also collaborate extensively on industry-wide, standards-based initiatives with partners from a variety of sectors — including government agencies, enterprises, application developers, and hardware manufacturers — to extend end-user access to digital maps and relevant spatial information.

Tele Atlas is currently working to create the digital maps of tomorrow through innovations that include:

• **Advanced Driver Assistance Systems (ADAS)** — Tele Atlas is actively working with the automotive industry, systems industry, governments, and other stakeholders on next-generation initiatives to make car driving safer, cleaner, more fuel efficient, and more comfortable. Our maps are a critical component of many ADAS applications, which perform a range of automated functions, including warning drivers that they are traveling too fast for legal speed limits or the curve ahead, and managing a car’s automatic gearbox to save fuel. Our comprehensive intersection-related data, including lane counts, road markings, traffic lights, and priority regulations, assist drivers safely across intersections.

• **3D city maps** — We’re also leading the effort to provide customers with three-dimensional maps of cities around the world that can help them quickly orient themselves in new environments through realistic map displays. Mobile Mapping is a fast, cost-efficient method to produce these virtual reality experiences for our partners’ end users. By the end of 2007, our 3D maps will be commercially available for more than 40 European cities — soon to be followed by cities throughout the US and other parts of the world.

• **Online data access** — We are collaborating with partners to prototype a model of Internet-based map delivery. This includes the wired or wireless delivery of complete maps for our partners’ applications, as well as online access to map services like map display and geocoding. To ease access for our partners, Tele Atlas is adopting open interface standards, such as those developed by the Open Geospatial Consortium. We are also actively working to further the development of data security standards, including Digital Rights Management and GeoDRM. This infrastructure will enable online integration of points of interest from our partners, allowing secure yet easy access to millions of fresh POIs that can be uploaded directly to an in-car or personal navigation (PNAV) device. The result: fresher maps with lower delivery costs.

• **Dynamic traffic information** — As a participant in the Mobile.Info project, Tele Atlas is working with an international consortium of partners from the automotive, broadcast, and systems industries to develop a new generation of traffic services. Central to this effort is “location referencing,” the real-time mapping of traffic events, for which Mobile.Info has selected the Agora-C standard, a method that enables the coding of virtually any location on the surface of the Earth. Tele Atlas has actively contributed to Agora-C’s development and is currently leading its testing for the Mobile.Info initiative.

• **Pedestrian navigation and multimodal transport** — Tele Atlas has prototyped pedestrian navigation maps containing such relevant information as walkways, pedestrian crossings, stairs, and street lighting. In addition, prototyping of multimodal transport maps — including bus, metro, and taxi information — is in an advanced stage. Integration mechanisms for external multimodal transport information are being defined that will allow real-time integration in the Tele Atlas digital map, thereby enabling in-time delivery of the freshest information possible.

Tele Atlas is the first digital map provider to add 3D landmarks, 3D city models, and 3D terrain models to its database.
As a world-class provider of digital map data and dynamic content for navigation and location-based services, Tele Atlas has offices in 24 countries and employs more than 2,400 full-time and part-time staff worldwide. To learn more about our capabilities and our company, or to find the Tele Atlas location nearest you, please visit www.teleatlas.com.