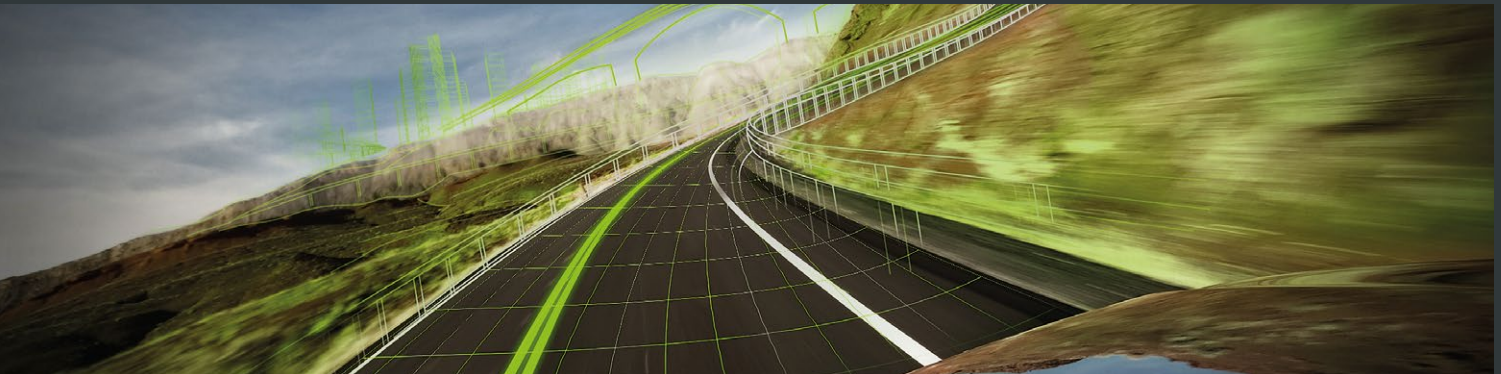# Elektrobit

Scalable state-of-the-art navigation technology

EB street director

Industry-leading high-end navigation-software solution EB street director

Since 2006, **several million drivers worldwide** have utilized navigation provided by **EB street director** in **Audi, GM, Mercedes-Benz, Seat, Skoda, smart,** and **VW** cars.

To create a better, connected driving experience, well-known and established carmakers trust EB street director, which empowers them to sell more cars equipped with cutting-edge infotainment solutions.

Due to its versatile and intelligent architecture, EB's navigation technology is easy to integrate. This guarantees fast project execution, which saves time and lowers costs.

EB street director is equipped with a state-of-the-art feature set, including:

▶ The latest 3D map rendering engines
▶ Integrated interfaces that allow drivers to gather location-based services via navigation, with minimal driver distraction
▶ Electronic horizon that provides map data for advanced driver assistance functions.

Saving development time and cost: EB street director's one-core principle

Every navigation project EB completes is different,
but all projects have one thing in common:
they are based on the same evolving navigation kernel.

We love our navigation core. That's why we use it again and again: in all markets, for entry level, mid-range, and premium systems, for series, preseries, R&D, and also on all available infotainment platforms. Always using the same navigation kernel guarantees our customers will receive a permanently enhanced and improved product. EB street director's core is also an ideal foundation for developing scalable navigation systems for different car lines and models.

Because EB has more than two decades of development experience in navigation and other fields, carmakers and suppliers receive a product with advanced technological expertise.
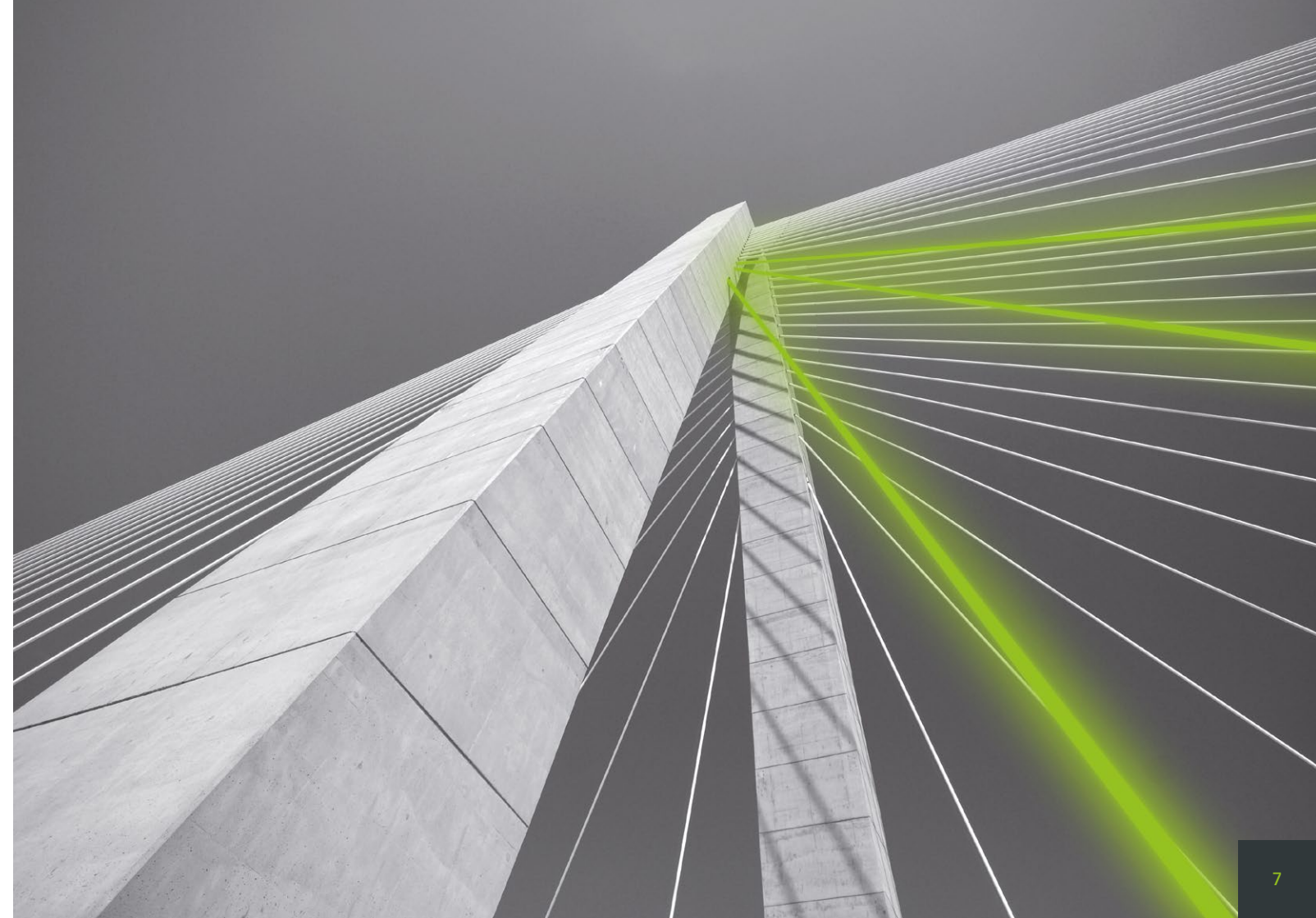
The key to fast innovation:
EB street director's versatile architecture

We want to be **as flexible as possible** for our customers.
That's why we created navigation-software architecture that
allows **adding and changing new features** and **easy integration.**

EB street director's architecture is modularly designed. It is easy to develop and integrate new features and functions. Defined interfaces allow integration without any difficulties.

At EB, we are familiar with agile development processes. Weekly delivery cycles and incremental development processes ensure fast customer feedback and minimize project risks.

Carmakers reduce costs and benefit from a navigation system which is on the cutting edge of technology. Expectations for time, quality, and cost are delivered.

High software quality: Sophisticated tooling and mature validation process

EB guarantees high software stability. Carmakers can be sure to receive individualized solutions within **agreed-upon time, quality, and cost.**

EB delivers a weekly software release to customers during the development phase. Before we deliver our navigation software, we thoroughly test it. With an exhaustive selection of automated tests permanently running on target systems, EB is continually working to improve the overall quality of the software it delivers.

Our specially trained test teams drive approximately 10,500 km, or more than 6,000 miles, per week. We do parallel field testing worldwide and under all conditions– not only in megacities such as Shanghai and New York, but also on highways and country roads. Single-day or several-day rides and testing under conditions specifically requested by the customer are measures every system undergoes.

The validation process is additionally supported by sophisticated tooling to analyze system freeze and software crashes, multichannel tracing, recording and replaying of real world scenarios. This in-depth testing allows us to fix bugs more quickly, guaranteeing that our customers' software is delivered within the agreed-upon time, quality, and cost specifications.

The new era of navigation: Hybrid navigation

Outsourcing features and functions to the EB Cloud allows drivers a **new navigation experience.** Data frequently updated from the **EB Cloud** provides the driver with **the latest information,** guaranteeing **flawless navigation.**

EB provides a server-based hybrid navigation solution that enriches the navigation experience with cloud-optimized content and navigation services.

These services include:
▶ Update service and on-demand map access for high-volume map data
▶ Next-generation routing taking dynamic traffic situations into account
▶ Online location search
▶ Dynamic POIs like fuel prices and parking information.

Drivers and carmakers benefit from this new navigation concept through:
▶ A seamless navigation experience with different devices
▶ Access to always-up-to-date map data and dynamic information
▶ Reduced map data memory footprint on targets
▶ Reduction of head unit processor load due to usage of navigation cloud services.

Advanced driver assistance systems (ADAS) powered by electronic horizon

Drivers trust **modern ADAS functions** to get them to their destination safely and more comfortably. Our **electronic horizon** allows carmakers to offer **navigation map-based ADAS functions.**

EB street director supports map-based driver assistance functions like adaptive head lights, traffic-sign recognition, and fuel-efficient driving. For this purpose, EB offers an electronic horizon provider and an electronic horizon reconstructor to provide map data such as road geometry and speed-limit profiles. This is the basis for a steadily growing number of functions which benefit from this technology.

All modules essential to the quality of major ADAS functions are provided by EB.

▸ Electronic horizon is also available as a stand-alone solution
▸ Supports ADASIS and
▸ OEM-specific standards
▸ Automotive-grade dead reckoning
▸ Electronic horizon provider
▸ Electronic horizon reconstructor

Being part of a well-oiled machine: Industry standards

By agreeing on certain **standards,** carmakers, service providers, and suppliers optimize their operations. Products can be reused and a flawless implementation of software across the automotive industry is possible.

Navigation Data Standard (NDS) Association

As a longtime member of the association, EB has actively promoted NDS standardization in market-driven solutions.

Genivi

EB is a member of the GENIVI Alliance; therefore, EB street director supports several GENIVI interfaces:

- ▶ Positioning
- ▶ Layer Manager
- ▶ Audio Manager
- ▶ Control

Transport Protocol Experts Group (TPEG)

Supporting the TISA TPEG standards allows flexible selection of traffic- and travel-information-related services and service providers. EB has been a TISA member for years and is contributing to TISA's standardization efforts through active participation in TISA TPEG working groups and taskforces.

Connected services:
Total solution provider with best-in-class partner ecosystem

We know drivers rely on **location-based services** because they want to know more about their environment. That's why we offer a **turnkey connected solution** for our customers.

EB is your partner for turnkey connected solutions, and together with specialized partners, EB delivers a connected end-to-end solution:
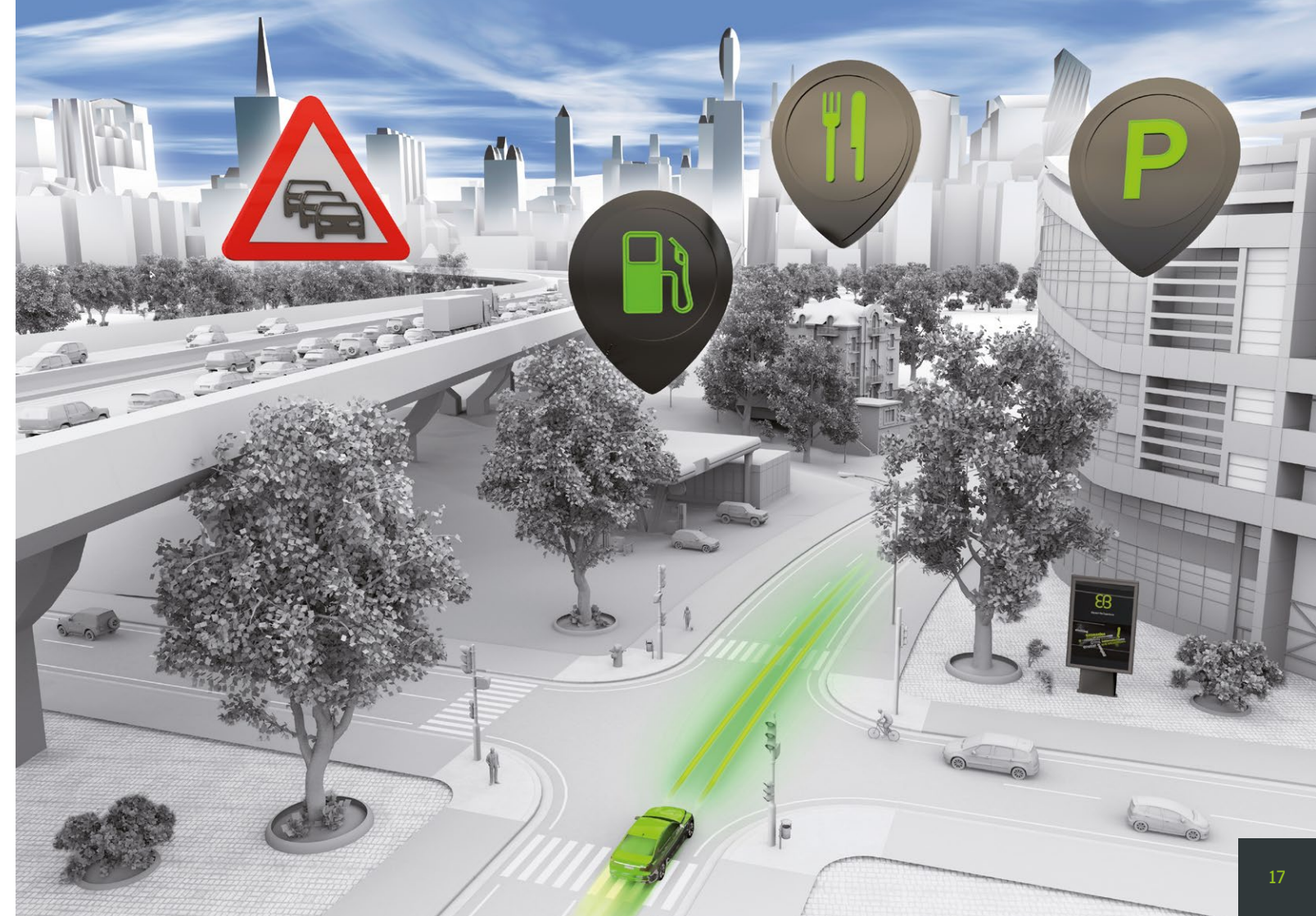
▸ Connected navigation, comprising a dynamic POI interface, map updates, satellite imagery, and an online traffic module

▸ Location-based services with content aggregation and administration

Customer relationship management, including customer support, marketing/advertising, and billing/invoicing.

Carmakers enjoy an all-around carefree package as well as the latest connected services.

It is also possible to integrate a single content provider or an OEM-owned service.

Navigation is our passion and your key to today's driving experiences.

EB is your trusted partner to develop a perfect **state-of-the-art navigation solution.**

EB provides the industry-leading high-end navigation-software solution which has already shipped in millions of cars. Its one-core principle helps you save valuable time and money.

A broad ecosystem with well-known and experienced partners ensures capturing driver demands.

EB street director's true automotive core integrates the latest features, like high-performance maps, electronic horizon with interfaces and information for advanced driver assistance functions, along with hybrid navigation.

EB constantly strives for the highest quality standards to support car manufacturers and automotive suppliers worldwide with creative, scalable software solutions and integration services.

EB street director, the versatile navigation solution from EB, currently ships in millions of vehicles across the globe, in more than 25 car models. EB's ultimate goal is to deliver on the promise of developing flexible, customizable, connected navigation solutions.

Contact us

Finland

Germany

France   Austria   Romania

USA

China

Japan

EB is a global company with branch offices all over the world.

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About Elektrobit

Elektrobit (EB) is an award-winning and visionary global supplier of embedded software solutions and services for the automotive industry. An industry leader with more than 25 years of service, EB's software powers over 70 million vehicles and offers flexible, innovative solutions for connected car infrastructure, human machine interface (HMI) technologies, navigation, driver assistance, electronic control units (ECUs), and software engineering services. EB is a wholly owned, independent subsidiary of Continental AG.