LuxCarta was created in 2015 from the merger of two leading geodata providers operating since 1989. From the beginning, LuxCarta has solved terrain challenges for many organizations and government customers in the defense/homeland security and navigation communities. However, LuxCarta has made its reputation as the worldwide leading provider of geodata to the telecom industry for use in wireless network planning and optimization. The exacting requirements of this ecosystem has prepared LuxCarta for the rigorous requirements of the simulation and training market.

Challenges Facing the Military Simulation & Training Community

Today’s military simulation and training community is faced with a number of challenges, including:

- More complicated operational environments – particularly urban areas
- The requirement to deliver accurate terrain data to multiple platforms, in different formats
- Training based on imperfect or out-of-date terrain data
- The requirement to deliver the latest data to the operators that require it, in time

Needs of the Simulation & Training Ecosystem

- 3D building data
- Accurate/realistic immersive environments for virtual reality/augmented reality (VR/AR)
- Data delivery in a compatible format that is geospecific or geotypical
- Global cloud-free orthoimagery and land use/land cover at higher resolutions
- Flexible procurement models, including global and regional subscriptions

Terrain for Simulation-based Training

LuxCarta delivers global cloud-free orthoimagery and land use/land cover at 10m resolution, along with 3D cities around the world, for use in simulation & training. Our catalogue includes cities with aerial and satellite imagery textures, along with those that have been procedurally textured using our own proprietary software.

LuxCarta provides correlated raw GIS data derived from medium- and high-resolution satellite imagery:

- DEM (DTM and DSM)
- Land use/land cover
- Orthoimagery
- Transportation and hydrography vectors
- Building features as 2.5D attributed footprints and 3D models

LuxCarta also supports all OGC formats.

Multi-domain and Multimedia Applications for LuxCarta Content
LuxCarta focuses on the creation and delivery of geospatial products for the global telecom, simulation & training and other vertical markets. We specialize in the rapid production and delivery of quality fit-for-purpose mapping products to expert end users utilizing the latest technology advancements achieved through extensive R&D.

Contact us today to learn more about LuxCarta’s support for the simulation and training ecosystem.

www.luxcarta.com

**Our Core Capabilities**

**Remote Sensing** – A full range of analysis capabilities – from state-of-the-art image processing to change detection and feature extraction – available from very high-resolution to continent-wide sizes. LuxCarta is able to rapidly provide geospecific building footprints or models with accurate location and height (1-2m accuracy) over very large areas.

**Digital Elevation Modeling** – Generation of digital 3D spatial models – from nationwide DTMs to sub-meter 3D city models.

**Innovation** – Image processing and computer vision R&D are areas of continuous research and ongoing development. A key focus is the innovative use of AI techniques (including machine learning) for large-scale digital map production in the cloud.

**Simplified Deployment & Product Delivery**

LuxCarta can deliver raw geodata to a customer or partner directly under a supply agreement. Data can also be provided on a project or subscription basis through web services in public or private cloud environments.

**LuxCarta: Your Global Terrain Provider**

- 100-strong production team
- 2 global production facilities
- Global archive of 95+ countries in 2D & 100s of 3D cities
- 7 global locations around the world
- 31 years – serving the needs of our customers