The incorporation of LuxCarta's land use/land cover at 10m reduced the production time of a Dagestan terrain created for a Bohemia Interactive Simulations customer by 20%.

Bohemia Interactive Simulations (BISim) is a global software company at the forefront of simulation and training solutions for defense and civilian organizations. Their mission is to harness the explosive potential of technology to revolutionize training and simulation.

BISim utilizes the latest game-based technology and a large, experienced in-house team of engineers to develop high-fidelity, cost-effective training and simulation software products and components for defense applications. TerraSim, a BISim company, specializes in the advanced software solutions to automate geospatial source data preparation and terrain generation.
CHALLENGES

- The TerraSim team gets many requests from BISim VBS3 and VBS4 customers requiring synthetic training environments for new areas of interest (AOIs).
- Available data sources vary in price and quality, especially in the developing world.
- Ambitious customer timelines for geodatabase completion and solution readiness.

PRODUCTS

- LuxCarta's 18-class land use/land cover (LULC), with orthoimagery and digital terrain models (DTMs) at 10m resolution.

BUSINESS & TECHNICAL BENEFITS

- Higher resolution than the VBS4 basemap; LULC and DTM allow for greater fidelity of simulations.
- A single set of global classifications means consistent products anywhere in the world.
- Huge time saving for creation of VBS database (~20%) over typical production pipeline.
- Server-space friendly implementation of large environments for VBS4 utilizing LuxCarta LULC for realistic procedural generation of synthetic surface imagery.

DEAL FACTS & FIGURES

AOI size - 41,116 sq. km

Layers provided - DTM, 18-class LULC, 8-class linear vectors and orthoimagery.

Total production timeline - LuxCarta 4 weeks; TerraSim 2 weeks.

“Our partner LuxCarta provides us with cloud-free orthoimagery and land use/land cover at 10m resolution at scale. This is a significant advantage for Bohemia Interactive Simulations and TerraSim’s ability to quickly produce large terrains. In our Dagestan project it saved our team at least 20% of our typical production time and allowed us to meet our customer’s aggressive deadline. With the release of VBS4, and its global rendering engine, I see great potential for large-area synthetic environments using LuxCarta’s terrain data to rapidly populate areas with accurate vegetation and ground surface placement. As LuxCarta rolls out their global coverage, we’ll have a partner able to rapidly deliver accurate environments anywhere.”

Earl Laamanen,
Technical Director at TerraSim, a BISim Company.