



Mapping the world for more than two decades

Map Data Development

Capability Statement

RMSI is the world's leading provider of navigation map development, maintenance and enhancement services. We have over two decades of experience and have worked with most of the large global map data providers.

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Key Mapping Objectives that we meet

RMSI mapping service offerings are broadly classified by the following three main objectives

1

Development and maintenance of new map data products

New map data development for geographies, or enhancement of maps based on new specifications such as HD maps

2

Enhancement and enrichment of existing map data products

Content enhancement of existing maps and content correction based on user feedbacks & on ground update

3

Re-engineering of existing maps

Complete map refresh of the existing map data or repurposing of existing maps based on specific use cases

Our unique Value Proposition

RMSI's unique value proposition and differentiator is our ability to synthesize domain and technology. We engage with clients right from project conceptualization to production, including continuous improvement.

We help clients select the best approach that addresses their business objectives. Our team of navigation mapping experts engage with clients from an early project planning stage so that right decisions can be made regarding build, replace, or refresh.

Next, we help define the specifications, project set up and pilots. RMSI has full in house capability to then scale up to meet project production requirements. In parallel, we continuously work with the client's organization to identify improvement and innovation opportunities.

“Over 10,000 person years of mapping experience”

Key Services that we offer

RMSI helps clients develop, update, and maintain high quality map data products, points of interest (POI) databases, 3D landmarks and models that support in-car navigation, web and mobile applications, emergency management, and location-based services.

We have a ready to deploy, workflow driven proprietary navigation map production toolkit – RMSI MapPro™. RMSI MapPro™ has a suite of integrated tools for each stage of the map data development life-cycle from input preparation, network data capture, attribution, video data capture, to POI integration. RMSI MapPro™ has been successfully deployed on multiple large map production engagements.

- Digital cartography
- Consultancy and specifications creation
- Image acquisition, processing & interpretation
- Street network digitization & realignment
- Linear road network creation from various sources
- Points of Interest (POI) and Areas of Interest (AOI) capture
- Attribute, road sign & video data capture
- Building 3D landmarks & models
- Mobile video mapping & field data collection
- HD Maps creation with semi-automated approach using AI & ML
- Indoor Mapping
- Geocoding Services

Skill Sets

We have a team of over 5,000 mapping specialists, and a demonstrable experience of working on large map data projects that required significant ramp up and training within a short turnaround time.

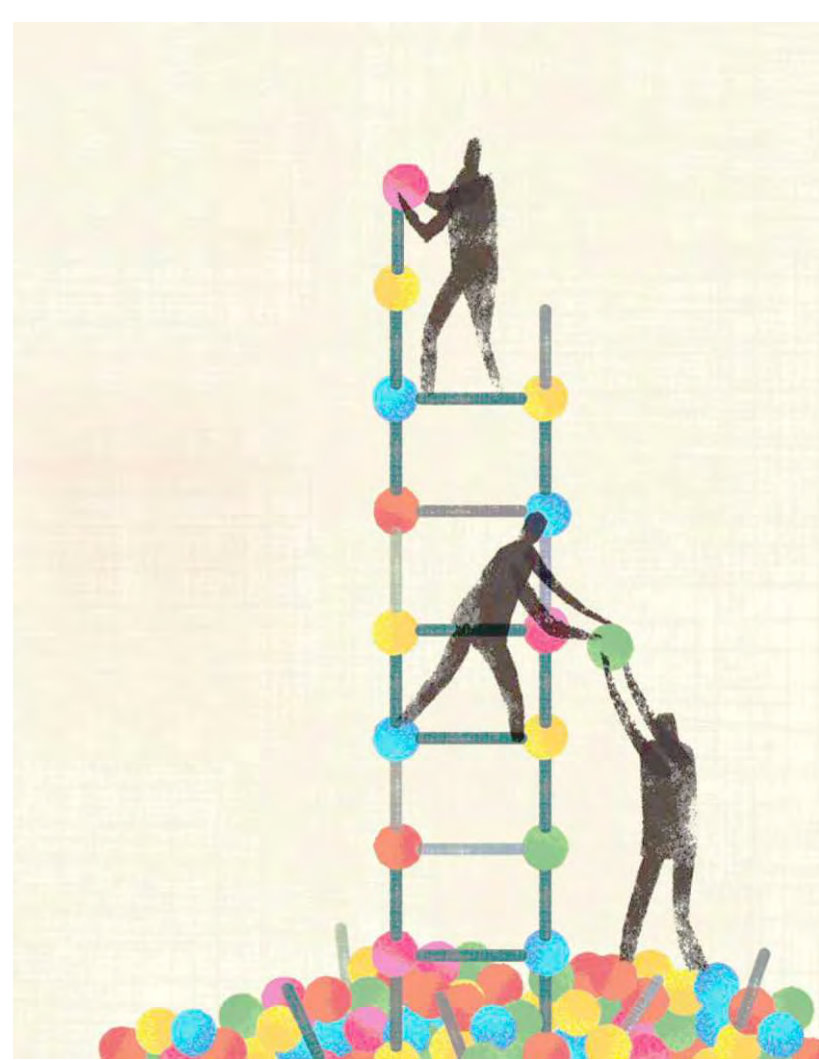
RMSI mapping related skillsets include image interpretation and processing, cartography, digitization, photogrammetry, LiDAR, application development, process improvement, project and program management.

“ Mapped
21 mn miles
of road
network ”

Operating Models we offer

RMSI is a global company with a client base of over 150 active clients spread across 30 countries. This has ensured that we have experience of working on flexible operating models to suit our clients.

For a large mapping engagement, these operating models are typically adopted in an offshore delivery model, considering the scale, cost and large ramp up requirements.



Operating Model 1

Client's ODC

- Client provides the infrastructure and office set up
- RMSI is responsible for meeting all project SLA's related to resources, ramp up, throughput, quality, etc.
- The pricing can either be based on a T&M model or can be a productivity linked payment

Operating Model 2

RMSI Dedicated ODC

- RMSI sets up a production ready locked down facility
- RMSI is responsible for meeting all project SLA's
- Pricing model
 - Upfront infrastructure and set up cost provided by the client during project set up
 - Project cost is either on a T&M model or productivity linked project cost

Operating Model 3

BOT Model

- RMSI implements the project as per operating model 2
- After achieving a steady state of operations, the project including infrastructure, hardware, software, and resources is transferred to the client at an agreed valuation

Incubating New Technologies

RMSI has made significant progress in incubating and defining new mapping standards and technologies that can transform production of next generation High Definition (HD) maps for emerging applications such as driverless vehicles

RMSI has already developed proprietary algorithms for auto image/object recognition, analysis, classification, and extraction along with auto building rooftop identification & road network capture.

These are based on the following AI, machine learning and big data technologies – Cloudera, Matlab, Theano, Keras, Chainer, Tensorflow, Caffe, Apache Hadoop, MapReduce, YARN, Hive, HBase, Pig, Sqoop.

Our proprietary map production toolkit MapPro™ is HD ready. We have the required skill sets to create HD maps using both ground and airborne Lidar and high resolution aerial imagery. Key services include specifications creation based on NDS Open Lane model and ADASIS (Advanced Driver Assistance Systems) version 3 standards, Lidar data processing and classification, feature extraction including road furniture, labelling, and localization, creation of HD maps (2D & 3D).



Success Stories

Implementing the largest greenfield navigation map data product in the world

Enhancement & enrichment of global map data using aerial imagery, video data & field survey reports

Geometry creation & attribute updates using high resolution aerial imagery

Maintaining the currency & accuracy of OS mastermap for entire Great Britain

House level geocoding for 36 Indian cities for building last mile connectivity

Update and maintenance of navigation map data for Italy, North America and ANZ regions

Salient Points

Market leader – Amongst the top 3 GIS providers in India

Employee resource base of over 5,000 employees

Technology partnerships – Synchronoss, SpatialNET, ESRI, Oracle, Microsoft, and GE

Quality certifications - CMMi level 5, ISO 27001, ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018

Track record of having implemented multiple multi year large scale GIS projects across the globe

Strategically located three development centres in India, and five global offices in U.S, Canada, U.K, U.A.E, & Australia

