

# Leica Geosystems Release Notes

**Product** Leica Zeno Mobile v3.6.2  
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**From** Jakob Lidl



Leica Geosystems AG  
Heinrich-Wild-Strasse  
CH-9435 Heerbrugg

E-mail: [jakob.lidl@leica-geosystems.com](mailto:jakob.lidl@leica-geosystems.com)

[www.leica-geosystems.com/Zeno](http://www.leica-geosystems.com/Zeno)

## Table of Contents

<b>1</b>	<b>ABOUT THE FEBRUARY 2023 RELEASE.....</b>	<b>5</b>
1.1	Zeno Mobile v3.6.2.....	5
1.1.1	List of features and functionalities in the latest version of Zeno Mobile	5
<b>2</b>	<b>ABOUT THE OCTOBER 2022 RELEASE.....</b>	<b>5</b>
2.1	Zeno Mobile v3.6.1 .....	5
2.1.1	List of features and functionalities in the latest version of Zeno Mobile	5
<b>3</b>	<b>ABOUT THE AUGUST 2022 RELEASE .....</b>	<b>6</b>
3.1	Zeno Mobile v3.6.....	6
3.1.1	List of features and functionalities in the latest version of Zeno Mobile	6
<b>4</b>	<b>ABOUT THE NOVEMBER 2021 RELEASE .....</b>	<b>7</b>
4.1	Zeno Mobile v3.5.....	7
4.1.1	List of features and functionalities in the latest version of Zeno Mobile	7
<b>5</b>	<b>ABOUT THE MAY 2021 RELEASE .....</b>	<b>9</b>
5.1	Zeno Mobile v3.4.....	9
5.1.1	Important information for all users	9
5.1.2	List of features and functionalities in the latest version of Zeno Mobile	9
<b>6</b>	<b>ABOUT THE NOVEMBER 2020 RELEASE .....</b>	<b>10</b>
6.1	Zeno Mobile v3.3.....	10
6.1.1	List of features and functionalities in the latest version of Zeno Mobile	10
<b>7</b>	<b>ABOUT THE AUGUST 2020 RELEASE .....</b>	<b>11</b>
7.1	Zeno Mobile v3.2.....	11
7.1.1	List of features and functionalities in the latest version of Zeno Mobile	11
<b>8</b>	<b>ABOUT THE FEBRUARY 2020 RELEASE .....</b>	<b>12</b>
8.1	Zeno Mobile v3.1 .....	12
8.1.1	List of features and functionalities in the latest version of Zeno Mobile	12
<b>9</b>	<b>ABOUT THE OCTOBER 2019 RELEASE.....</b>	<b>13</b>
9.1	Zeno Mobile v3.0 .....	13
9.1.1	List of features and functionalities in the latest version of Zeno Mobile	13
<b>10</b>	<b>ABOUT THE DECEMBER 2018 RELEASE .....</b>	<b>15</b>
10.1	Zeno Mobile v2.1 .....	15
10.1.1	List of features and functionalities in the latest version of Zeno Mobile	15
10.2	GPS FW 6.516 for Zeno 20 and GGo3.....	17

10.2.1	List of features and functionalities of the new GPS FW 6.516	17
10.3	GGo4/GGo4 plus Firmware .....	17
10.3.1	List of features and functionalities of the new GGo4/GGo4 plus Firmware	18
<b>11</b>	<b>ABOUT THE AUGUST 2018 RELEASE .....</b>	<b>18</b>
11.1	Zeno Mobile v2.0 .....	18
11.1.1	List of features and functionalities in the latest version of Zeno Mobile	18
11.2	Leica Zeno Tab 1 & GGo4 plus Tablet Solution release.....	21
<b>12</b>	<b>ABOUT THE FEBRUARY 2018 RELEASE.....</b>	<b>22</b>
12.1	Zeno Mobile v1.9.....	22
12.1.1	List of features and functionalities in the latest version of Zeno Mobile	22
<b>13</b>	<b>ABOUT THE NOVEMBER 2017 RELEASE .....</b>	<b>23</b>
13.1	Zeno Mobile v1.8.2 .....	23
13.1.1	List of features and functionalities in the latest version of Zeno Mobile	23
<b>14</b>	<b>ABOUT THE OCTOBER 2017 RELEASE.....</b>	<b>24</b>
14.1	Zeno Mobile v1.8.1 .....	24
14.1.1	List of features and functionalities in the latest version of Zeno Mobile	24
<b>15</b>	<b>ABOUT THE SEPTEMBER 2017 RELEASE.....</b>	<b>24</b>
15.1	Zeno Mobile v1.8.....	24
15.1.1	List of features and functionalities in the latest version of Zeno Mobile	24
<b>16</b>	<b>ABOUT THE JUNE 2017 RELEASE .....</b>	<b>25</b>
16.1	Zeno Mobile v1.7 .....	25
16.1.1	List of features and functionalities in the latest version of Zeno Mobile	25
<b>17</b>	<b>ABOUT THE OCTOBER 2016 RELEASE.....</b>	<b>26</b>
17.1	Zeno Mobile v1.6.....	26
17.1.1	List of features and functionalities in the latest version of Zeno Mobile	26
<b>18</b>	<b>ABOUT THE JUNE 2016 RELEASE .....</b>	<b>28</b>
18.1	Zeno Mobile v1.5 .....	28
18.1.1	List of features and functionalities in the latest version of Zeno Mobile	28
18.1.2	Available Languages	28
<b>19</b>	<b>ABOUT THE APRIL 2016 RELEASE .....</b>	<b>29</b>
19.1	Zeno Mobile v1.4.....	29
19.1.1	List of features and functionalities in the latest version of Zeno Mobile	29
19.1.2	Stakeout	29
19.1.3	From MS Excel into Zeno Mobile	29
19.1.4	Quick Attribute Input	30

19.1.5	Support of new coordinate systems and transformations	30
19.1.6	Improvements and bug fixes	30
19.1.7	Available Languages	30
<b>20</b>	<b>ABOUT THE DECEMBER 2015 RELEASE .....</b>	<b>31</b>
20.1	Zeno Mobile v1.3 .....	31
20.1.1	List of features and functionalities in the latest version of Zeno Mobile	31
20.1.2	Stakeout	31
20.1.3	Auto Types	31
20.1.4	Position Usage	32
20.1.5	Averaging	32
20.1.6	Support of international character sets	32
20.1.7	Performance and Stability Improvements	33
<b>21</b>	<b>ABOUT THE OCTOBER 2015 RELEASE.....</b>	<b>33</b>
21.1	Zeno Mobile v1.2.....	33
21.1.1	List of features and functionalities in the latest version of Zeno Mobile	33
<b>22</b>	<b>ABOUT THE SEPTEMBER 2015 RELEASE.....</b>	<b>35</b>
22.1	Zeno Mobile v1.1 .....	35
22.1.1	List of features and functionalities in the latest version of Zeno Mobile	35
<b>23</b>	<b>ABOUT THE JULY 2015 RELEASE.....</b>	<b>38</b>
23.1	Zeno Mobile v1.0.....	38
23.1.1	Features of Leica Zeno 20 at a glance	38
23.1.2	The New GIS Collector Hardware	38
23.1.3	Leica Zeno Mobile	39

## 1 About the February 2023 release

### 1.1 Zeno Mobile v3.6.2

Build number: 1963

Release date: 22.02.2023

Supported operating systems:

- Android: 8 – 13

*Support of different Android versions cannot always be guaranteed as operating system updates are out of Leica Geosystems control.*

#### 1.1.1 List of features and functionalities in the latest version of Zeno Mobile

##### New Zeno Mobile Features at a Glance

###### WFS/WFS-T Invert Axis Orientation

- New option when adding a WFS or WFS-T layer to invert the axis orientation if needed.

###### Improvements and bug fixes

- Fixed critical issues with languages that use comma as a decimal separator (German, Dutch, Spanish, Italian etc.)

### Customer Care Packages (CCP's)

All customers with a valid CCP contract can install the new Zeno Mobile at no additional costs. The maintenance date of the software is **10.08.2022**. It is important customers whose CCP's have expired before this date renew, to install the latest version.



### MyWorld

The latest version of Zeno Mobile is also available to download from myWorld:  
<https://myworld.leica-geosystems.com/>



## 2 About the October 2022 release

### 2.1 Zeno Mobile v3.6.1

Build number: 1943

Release date: 05.10.2022

#### 2.1.1 List of features and functionalities in the latest version of Zeno Mobile

##### New Zeno Mobile Features at a Glance

###### FLX100 plus Support

- The new FLX100 plus Smart Antenna is supported in Zeno Mobile.

###### HxGN Content Program – Aerial Imagery URL Change Reminder

- As part of improvements to the HxGN Content Program – Aerial Imagery, there is now just one WMS layer in Zeno Mobile that covers the whole world at the best resolution available, rather than separate layers for North America and Europe.
- The server hosting the original layers **will be turned off on November 1<sup>st</sup> 2022**.
- It is important that existing Zeno Mobile users who wish to continue to use the Hexagon Imagery Program after this date **upgrade to Zeno Mobile 3.6.1** to take advantage of the new layer.

### Improvements and bug fixes

- Zeno Mobile is now compatible with Android 13.
- Fixed issue with specific WFS not loading when using map filtering.
- Fixed issue with KML file importing layers but not displaying data in the map.
- Fixed issue with importing GML files in WGS84 coordinate system.

### Customer Care Packages (CCP's)

All customers with a valid CCP contract can install the new Zeno Mobile at no additional costs. The maintenance date of the software is **10.08.2022**. It is important customers whose CCP's have expired before this date renew to install the latest version.



### MyWorld

The latest version of Zeno Mobile is also available to download from myWorld: <https://myworld.leica-geosystems.com/>



## 3 About the August 2022 release

### 3.1 Zeno Mobile v3.6

Build number: 1937

Release date: 10.08.2022

#### 3.1.1 List of features and functionalities in the latest version of Zeno Mobile

### New Zeno Mobile Features at a Glance

#### FLX100 plus Support

- The new FLX100 plus Smart Antenna is supported in Zeno Mobile.

#### WFS and ArcGIS Online Feature Import Filter

- You can now limit the amount of data that is loaded in Zeno Mobile from large WFS, WFS-T or ArcGIS Online data sets.
- Define a geographic extent and/or attribute filter to quickly load subsets of large data.

#### Import CSCS Files from Server

- CSCS files can now be downloaded from an online repository and used in a project's coordinate system the same way as Geoid models.

#### GML Import and Export

- You can now import and export GML files in Zeno Mobile.

#### Extended Metadata Stored in Photos

- When taking a photo stored with a GNSS point the following are now included in the EXIF header:



- Unique IDs based on a timestamp.
- x y z coordinates.
- Bearing in relation to north.

#### **HxGN Content Program – Aerial Imagery URL Change**

- As part of improvements to the HxGN Content Program – Aerial Imagery, there is now just one WMS layer that covers the whole world at the best resolution available, rather than separate layers for North America and Europe.
- The server hosting the original layers **will be turned off on November 1<sup>st</sup> 2022**.
- It is important that existing Zeno Mobile users who wish to continue to use the Hexagon Imagery Program after this date **upgrade to Zeno Mobile 3.6** to take advantage of the new layer.

#### **Improvements and bug fixes**

- Satellites in use now shown in the status bar for FLX100 and FLX100 plus.
- QZSS satellites in use now shown in the status bar with the letter “J”.
- Dutch coordinate system Amersfoort / RD New now supported.
- The direction arrow in the Stakeout window has been made larger for better visibility.
- Improved loading time for large Shapefiles.
- Fixed feature selection not working correctly with Standard license.
- Fixed Stakeout for 2D shapefiles or coordinates without height values.
- Fixed renamed layers exported as Shapefile have the correct name.
- Fixed label settings from ‘Based on’ projects are correctly retained.
- Fixed error importing ArcGIS Online features with no geometry.
- Fixed issue with selecting commas from the keyboard in landscape mode.
- Fixed incorrect RTK point role for FLX100.

#### **Customer Care Packages (CCP`s)**

All customers with a valid CCP contract can install the new Zeno Mobile at no additional costs. The maintenance date of the software is **10.08.2022**. It is important customers whose CCP's have expired before this date renew to install the latest version.



#### **MyWorld**

The latest version of Zeno Mobile is also available to download from myWorld: <https://myworld.leica-geosystems.com/>



## **4 About the November 2021 release**

### **4.1 Zeno Mobile v3.5**

Build number: 1830

Release date: 08.11.2021

#### *4.1.1 List of features and functionalities in the latest version of Zeno Mobile*

### **New Zeno Mobile Features at a Glance**

## Project backup

- Due to security restrictions on the latest Android updates, apps are no longer allowed to save data in publicly accessible folders; **\*\* you will lose all your data if you uninstall Zeno Mobile 3.5 without backing up your projects beforehand.**  
\*\*
- Because of this we have implemented a back up notification to remind you to share projects to a suitable location (on the device or in the cloud) to avoid data loss.
- Reminders show you if a project has been backed up or not and where it was last shared to.
- **Please note** the back up notification is only for projects not individual layers.

To avoid data loss, Zeno Mobile will remind you to back up your projects as shown below:



Your project has not been backed up. Please do so to avoid losing data.



Your project was last backed up over 7 days ago. Please share your project to avoid losing data.



Project has been backed up in the last 7 days.

## CAD Improvements

- CAD file text is now displayed in the map screen but is not editable.
- Point features now retain their attributes when saved as a CAD file.

## Google Drive and Microsoft OneDrive support

- You can now add your Google Drive or Microsoft OneDrive account to Zeno Mobile.
- Directly import or export data from your Zeno Mobile projects to your favourite online storage provider.

## More sharing options with 'share sheet'

- You can now share layers and projects using the Android share sheet functionality.
- Use other apps stored on your device to share data for example email, WhatsApp, Discord, Slack or other online storage providers not natively supported by Zeno Mobile.

## Labelling

- Label Zeno Mobile point features using one or more attributes.
- Modify size, colour, and placement of the labels.
- When exporting Zeno Mobile point features to DXF/DWG format, all displayed labels will be automatically shown in AutoCAD.
- **Please note** labelling is currently only compatible with the default circular point symbol.

## GS18 T / I tilt control

- When connected to a GS18 T or I, you can now turn the tilt function on/off directly within Zeno Mobile
- This is useful if you want to use Smart Positioning.

## Save Settings

- You can now save your Zeno Mobile settings (RTK profiles, accuracy limits and units etc) to import again later.
- A settings back up file is created when sharing with online storage providers or to your device storage.
- Saving settings is useful if you need to setup the same settings across multiple devices or if you install Zeno Mobile on a new device.
- **Please note** when you import a settings file it will overwrite any existing settings you have defined. For security reasons usernames and passwords for RTK profiles are not stored and must be entered manually after importing a settings file.

## Improvements and bug fixes

- Android 12 is now supported.
- Cut and clone is now available for CAD features.
- Zeno Mobile projects can now be exported to DWG/DXF.
- Layer visibility settings in Zeno Mobile are retained in CAD files when viewed in AutoCAD. If the layer is set to off in Zeno Mobile it will be off in AutoCAD for example.
- The 0 layer in CAD files is now shown white-on-black in the multi-feature tag for better visibility.



- Fixed layers with attribute names that include spaces exporting correctly.
- Fixed error in Google Earth after exporting projects as KML.
- Fixed numeric auto fields not always being filled automatically.
- Fixed Shapefiles failing to import because of .prj files having different spelling of 'meter'.
- Fixed Feature Services in the ArcGIS Online folders are now ordered alphabetically.
- Fixed issue with data not stored correctly when using a specific workflow with projects based on another project.

### Customer Care Packages (CCP`s)

All customers with a valid CCP contract can install the new Zeno Mobile at no additional costs. The release date of the software is **03.11.2021**. It is important customers renew expired CCP's to install the latest version.



### MyWorld

The latest version of Zeno Mobile is also available to download from myWorld: <https://myworld.leica-geosystems.com/>



## 5 About the May 2021 release

### 5.1 Zeno Mobile v3.4

Build number 3<sup>rd</sup> party: 1729

Release date: 05.05.2021

#### 5.1.1 Important information for all users

- Your current Zeno Mobile version must be uninstalled from your device before installing the new version.
- You will not lose any data or settings.
- Instructions are provided in the new version notification displayed within the app upon release.
- For myWorld users, please download the new .apk and copy it to your device. Uninstall Zeno Mobile and then run the new .apk to install version 3.4

#### 5.1.2 List of features and functionalities in the latest version of Zeno Mobile

### New Zeno Mobile Features at a Glance

#### CAD Editing and Sharing

- Share features created in Zeno Mobile directly to DWG or DXF formats.
- Load and edit existing CAD files in Zeno Mobile maintaining the structure and styling of the original file. No conversions are performed meaning the file retains its native CAD formatting.
- Measure with GNSS directly in a CAD file and improve accuracy with Smart Positioning.
- Supporting documents/videos for the new CAD feature will be available soon after release.

#### Current limitations with the new feature

- There are some limitations with the new CAD feature which will be addressed in future Zeno Mobile versions
- In this release text, attributes and complex hatching of closed polylines are not supported

### **GS18 T post processing and GS18 I support**

- You can now use Smart Positioning with the GS18 T / GS18 I to improve GNSS measurements. (tilt is not supported with post processing)
- Post process survey data with Leica Infinity or Zeno Office.
- Please note GS18 I **imaging is not supported** in Zeno Mobile

### **Attachment improvements**

- Attach images, videos, documents and voice recordings to any Zeno Mobile feature.
- Share and synchronize all attachments with ArcGIS Online and Zeno Mobile projects for easy access throughout the organization.

### **Geoid download**

- Download more than 300 Geoid files from the cloud free of charge and use them in your Zeno Mobile projects for precise orthometric height.

### **Improvements and bug fixes**

- New “recents” function in the multi-feature editing dialog to make projects with many layers more user friendly. The last used layer is always at the top of the list.
- KML exports use the current geoid set for height, not just EGM2008.
- Stakeout works correctly with Geographic coordinate systems that include a geoid.
- Changing layer order in the table of contents also changes in the attributes tab.
- Fixed crash when creating several projects based on another project.
- Fixed crash with Finnish language in the feature query tab.

### **Customer Care Packages (CCP`s)**

All customers with a valid CCP contract can install the new Zeno Mobile at no additional costs. The release date of the software is **05.05.2021**. It is important customers renew expired CCP's to install the latest version.

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### **MyWorld**

The latest version of Zeno Mobile is also available to download from myWorld: <https://myworld.leica-geosystems.com/>

**my**  
**world**

## **6 About the November 2020 release**

### **6.1 Zeno Mobile v3.3**

Build number 3<sup>rd</sup> party: 1641

Build number Zeno 20: 1641

Release date: 18.11.2020

#### **6.1.1 List of features and functionalities in the latest version of Zeno Mobile**

### **New Zeno Mobile Features at a Glance**

#### **Leica Zeno FLX100 Smart Antenna**

- The new Leica Zeno FLX100 smart antenna is now supported in Zeno Mobile.
- Use it however you want: On a pole, as a handheld, integrated with Detection Systems and directly on the asset.

*\* Please note the FLX100 is not supported on the Zeno 20*

#### **Laser Rangefinders**

- Connect Zeno Mobile to DISTOs and laser rangefinders.
- Collect offset points in a range of workflows: Horizontal Distance, Distance-Distance, Azimuth-Azimuth. For more information, please refer to the “How to use Laser Rangefinders with Zeno Mobile” document available in myWorld.
- Improve the accuracy of measurements automatically using Smart Positioning
- Supported devices:
  - DISTOs:

- D2
- X3
- X4
- D510
- D810
- S910
- Laser Technology rangefinders:
  - TruPulse 360 & 360R
  - TruPulse 200X

*\* Please note only TruPulse devices are supported on the Zeno 20*

#### **GS18 T**

- The GS18 T smart antenna is now compatible with Zeno Mobile. All benefits of the GS18 T antenna can now be utilized within Zeno Mobile.
- Take advantage of its IMU and true tilt compensation during data collection.
- For more information, please refer to the “How to connect to GS18 T in Zeno Mobile” document available in myWorld.

*\* Please note the GS18 T is not supported on the Zeno 20*

#### **Improvements and bug fixes**

- You can now zoom much further into the map window
- Stakeout performance improvements
- Prime Meridian text included with Shapefile exports
- Coordinates can be entered for Stakeout with no features in the map window
- Projects correctly export when containing layers with special characters
- Projects correctly export when containing layers with no geometry
- Projects correctly export when containing 2 or more layers with the same name

## **7 About the August 2020 release**

### **7.1 Zeno Mobile v3.2**

Build number 3<sup>rd</sup> party: 1573

Build number Zeno 20: 1575

Release date: 03.08.2020

#### *7.1.1 List of features and functionalities in the latest version of Zeno Mobile*

#### **New Zeno Mobile Features at a Glance**

##### **New Query functionality - Filter by attributes**

- From ZM 3.1, It was possible to query survey (measured) points.
- It is now possible to filter the data by attributes in the “Feature” tab or directly in the layer settings (Filter).
- It is possible to export just the filtered data.

##### **Web Feature Service - Transactional (WFS and WFS-T)**

- OGC Standard.
- Data flow solution over the internet for non-ESRI users.
- Offline data collection still possible.
- One-way synchronization from Zeno Mobile to the server is supported.
- **Please note:** WFS/WFS-T are not supported on Zeno Mobile running on a Zeno 20.

### Esri ArcGIS Enterprise on-premises support

- From ZM 3.1, It was possible to connect to ESRI Cloud using ArcGIS Online hosted by Esri.
- It is now possible to connect to your on-premises server.
- This new implementation supports servers with standard settings.
- Contact us if your on-premises configuration is not supported.

### New cable locator support

- Vivax-Metrotech – vLoc2-Pro, vLoc-Pro3 and vLoc3-ML Receivers is now supported in Zeno Mobile.

### Improvements and bug fixes

- Fixed issues related to specific Android devices

## Customer Care Packages (CCP`s)

All customers with a valid CCP contract can install the new Zeno Mobile at no additional costs. The release date of the software is **31.07.2020**. It is important customers renew expired CCP's to install the latest version.

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## MyWorld

The latest version of Zeno Mobile is also available to download from myWorld: <https://myworld.leica-geosystems.com/>

**my**  
**world**

## 8 About the February 2020 release

### 8.1 Zeno Mobile v3.1

Build number 3<sup>rd</sup> party: 1529

Build number Zeno 20: 1530

Release date: 14.02.2020

#### 8.1.1 List of features and functionalities in the latest version of Zeno Mobile

### New Zeno Mobile Features at a Glance

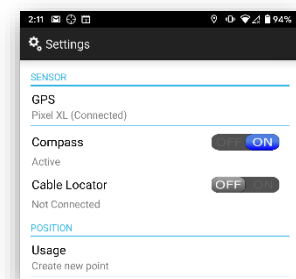
#### Support of Esri Web Maps

- Zeno Mobile now supports Esri web maps.
- Import and synchronise existing web maps in Zeno Mobile.
- Publish Zeno Mobile projects as a web map to ArcGIS Online.
- For more information on web maps please visit the [Esri](#) website.

Note: Esri hosted basemap layers and raster background layers are not supported.

#### Stakeout improvements

- You can now turn the internal compass of your device on/off.
- This new feature is useful for devices that do not have a tilt compensated compass which can make staking out difficult when using the device at an angle on a survey pole.
- Note when the compass is turned off the stakeout tool is fixed with north pointing 'up'.
- It is recommended to use your device flat where possible when staking out for best compass performance.



### Hexagon Imagery Program

- New layers are now included as part of the built-in WMS.
- Europe 30cm resolution.
- North America 15cm and 30cm resolution.

### Improvements and bug fixes

- Fixed exporting layers as ascii text.
- Fixed issues importing KML files.
- Fixed importing Shapefiles outside of a ZIP file from Dropbox.
- Fixed snapping to points originally measured in Zeno Mobile 2.1
- Fixed exporting data to micro SD card on Samsung Tab 2 device.
- Improvement in speed and stability of opening large datasets.

### Customer Care Packages (CCP`s)

The maintenance end date for Zeno Mobile has been frozen for this release due to several important improvements. If customers are using Zeno Mobile v3.0 or have a valid CCP until 31.10.19, they will be able to install and use this latest version.



It is always important customers renew expired CCP's to install the latest version.

### MyWorld

The latest version of Zeno Mobile is also available to download from myWorld: <https://myworld.leica-geosystems.com/>



## 9 About the October 2019 release

### 9.1 Zeno Mobile v3.0

Build number: 1498

Release date: 31.10.2019

#### 9.1.1 List of features and functionalities in the latest version of Zeno Mobile

### New Zeno Mobile Features at a Glance

#### Esri Geospatial Cloud

- Connect to ArcGIS Online or your organisation's ArcGIS Online Enterprise account directly from within Zeno Mobile (on premise installations of ArcGIS Online Enterprise are not yet supported)
- Quickly create layers and instantly share them with anyone, anywhere.
- Data is transferred and synchronised between Zeno Mobile and the cloud at the touch of a button. Seamlessly view your data online or in ArcMap and ArcGIS Pro.
- Depending on the requirements of your workforce, data collection privileges can be controlled by Esri user types. For example, a user with type Viewer can only view data in Zeno Mobile and cannot edit, delete or publish. Users with type Editor

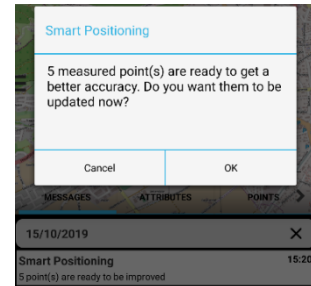


can view, edit and delete data. Users with type Creator can view, edit, delete and publish new data.

- **Please note:** Online connection to Esri's Cloud system is not supported on Zeno Mobile running on a Zeno 20.

### Smart Positioning

- Zeno Mobile's innovative Smart Positioning ensures that you will always receive the best positional accuracy. Depending on the existing conditions and available services, Zeno Mobile selects the optimal correction source – from RTK to Post Processing.
- Revival of GNSS Post Processing! Never worry about the loss of mobile coverage and RTK again. Through Zeno Mobile's Smart Positioning, always have highly accurate coordinates with HxGN SmartNet's cloud post processing service.
- Post Processing – the Zeno Mobile way. Expertise in GNSS post processing is not required. Corrections are performed directly in Zeno Mobile without the need for additional desktop software.
- Service available in all countries that have HxGN SmartNet.  
**Please note:** A SmartNet RTK GIS Unlimited subscription is required to use Smart Positioning in Zeno Mobile.

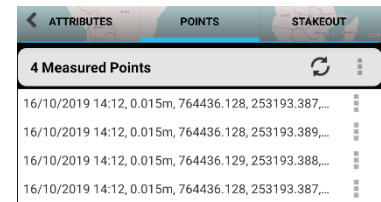


### New occupation time settings

- It is now possible to increase the occupation time automatically if GNSS accuracy is worse than a certain value.
- If the accuracy value is met then, an occupation time of 1 second is automatically used and raw data is not stored.

### New survey point query function

- It is now possible to query all points/vertices measured from GNSS.
- Combined with Smart Positioning this enables to view the improvements made to your GNSS measurements.
- Filter results based on accuracy or date.
- View GNSS metadata by selecting a point in the table.
- Automatically zoom to a point by selecting it in the table.



### Extended GNSS metadata storage

- Store various GNSS meta information (e.g. DOPs, accuracies, number of satellites etc) directly in the features' attributes as an auto field.

### Extended Coordinate metadata storage

- Add "coordinate auto fields" to record x,y,z, easting, northing and height as an attribute.

### Android 10

- Zeno Mobile now supports the latest Android 10 operating system.

### Leica GS07 smart antenna

- Zeno Mobile now supports the Leica GS07 smart antenna.



### Further cable locator support

- Connect the MRT-700 underground cable and pipe locator to Zeno Mobile.

### Improvements and bug fixes

- Galileo and BeiDou now used during post processing of raw data when available.
- Fixed correct date/time shown in new feature layers.
- Fixed error when measuring first point after force stopping the app.
- Fixed crash when cancelling import of particular raster file.
- Fixed viewing averaging and streaming pop-ups in landscape mode.
- Fixed export to USB on Zeno Tab 1.

### Training Videos

Please visit the [Leica Zeno GIS YouTube](#) page to view the What's New video.

### Use Case Videos

There are two new professional use case videos demonstrating:

- [Zeno Mobile's new data flow to Esri's Geospatial Cloud](#)
- [Automatic post processing through Smart Positioning](#)

### Customer Care Packages (CCP's)

All customers with a valid CCP contract can install the new Zeno Mobile at no additional costs. The release date of the software is **31.10.2019**. It is important customers renew expired CCP's to install the latest version.



### MyWorld

The latest version of Zeno Mobile is also available to download from myWorld: <https://myworld.leica-geosystems.com/>



## 10 About the December 2018 release

### 10.1 Zeno Mobile v2.1

Build number: 1408

Release date: 13.12.2018

10.1.1 *List of features and functionalities in the latest version of Zeno Mobile*

### New Zeno Mobile Features at a Glance

Raster file support

- It is now possible to use raster images as basemaps
- The formats GeoTIFF, TIF, PNG, JPG and BMP are supported
- Raster images can be loaded in the layer manager of Zeno Mobile in the same way as other currently supported data formats
- Only 8bit raster images are supported across all formats
- Please note you should know the correct coordinate system of your raster images so that they are displayed in the correct location once loaded in the map screen
- If you are using a format other than GeoTIFF you must have an accompanying world file for your images as follows: TIF = TFW, PNG = PGW, JPG = JGW, BMP = BPW
- Please note the larger the image, the longer it will take to load in Zeno Mobile. Size is defined by the number of rows and columns an image has



#### **Android 9 support for 3<sup>rd</sup> party devices**

- Zeno Mobile for 3<sup>rd</sup> party is now supported on Android versions 5 to 9.1
- Zeno Mobile continues to be supported on the Zeno 20

#### **More control over GNSS raw data logging**

- It is now possible to turn raw GNSS data logging on/off by using the on/off switch under the Averaging setting. As soon as you average your position, raw data will automatically be logged.

#### **3M Dynatel locator support**

- We have extended our cable locator support by including the 3M Dynatel locator

#### **Amazon Appstore app for Zeno 20**

- A new Amazon Appstore app is now available on the Zeno 20
- You can download the app from [here](#)
- Please note that the 1MobileMarket app will no longer work

#### **Improvements and bug fixes**

- Dropbox account login issue resolved on Zeno 20. Please download and install the Firefox web browser to the Zeno 20 and use it to perform the login for your Dropbox account. If you need assistance with this please contact Zeno Support.
- Due to technical changes made on Zeno Mobile for Zeno 20, Zeno Mobile will no longer auto-run on the device. After installing, a Zeno Mobile shortcut will now be added to the home screen of the Zeno 20.  
If you would like to manually set Zeno Mobile to auto-run please use the following steps:
  - On the Zeno 20 open the *Tools* option
  - Select *Startup*
  - Tap and hold on *Zeno Mobile*
  - Choose *OK* to the message “Do you want to add to [Auto-Run] list this app?”
  - Zeno Mobile will now auto-run whenever the Zeno 20 is switched on
- Transparency support for WMS
- Android screen rotate now supported for 3<sup>rd</sup> party devices

#### **Training Videos**

Please visit the [Leica Zeno GIS YouTube](#) page to view the What's New video.



### Customer Care Packages (CCP`s)

All customers with a valid CCP contract can install the new Zeno Mobile at no additional costs. The release date of the software is **13.12.2018**. It is important customers renew expired CCP's to install the latest version.



### MyWorld

The latest version of Zeno Mobile is also available to download from myWorld: <https://myworld.leica-geosystems.com/>



### Notice

As this release contains several improvements please make sure that every customer updates his current installation either over the air or via manual download from myWorld.

### 10.2 GPS FW 6.516 for Zeno 20 and GG03

Version number: 6.516

Release date: 13.12.2018

The new GPS FW 6.516 is available now for Zeno 20 and GG03 devices.

#### 10.2.1 List of features and functionalities of the new GPS FW 6.516

#### New GPS FW 6.516 Features at a Glance

##### GPS FW Version 6.516

- Bug fixes and minor tracking improvements

##### Zeno 20 Android - GPS FW Loader 6.516

- New apk available to upload the FW 6.516 on a Zeno 20 Android device
- Download the apk installer and user guide from myWorld <https://myworld.leica-geosystems.com/>

##### Zeno 20 Windows & GG03

- Download the FW file from myWorld <https://myworld.leica-geosystems.com/> and update the FW with the available FW loader tools, which are included with Zeno Field and Zeno Connect.

**Please note:** on the Zeno 20 Windows version, the GPS must be switched on manually in the WEH settings, before a FW upload can be started.

### 10.3 GG04/GG04 plus Firmware

The new GG04/GG04 plus firmware is available to download from myWorld.

Firmware versions:

ME firmware: 7.500 (GG04 and G004 plus)

IF firmware: 1.0.23 (GG04 plus only)

Release date: 15.11.2018

### 10.3.1 List of features and functionalities of the new GG04/GG04 plus Firmware

#### New GG04/GG04 plus Firmware Features at a Glance

##### GG04 & GG04 plus

- General tracking & positioning improvements, especially for Galileo satellites
- TerraStar-C PRO support
- Support of Galileo Signals when using Spot Prime which allows more stable positioning through higher amount of satellites used
- Drastically improved convergence times for Spot Lite & Prime
- Spot Prime: approximately 15 minutes of convergence time until accuracy < 10cm
- Spot Lite: approximately 8 minutes of convergence time until accuracy < 60cm

All Spot Lite and Spot Prime licenses will automatically be upgraded to the PRO version when using latest FW. To maximize Spot licenses, be sure to add Galileo to your tracked satellite systems.

##### GG04 plus only

- Automatic reconnect functionality available for iOS devices
- A GG04 plus antenna will remember which iOS devices it was last connected to and will automatically establish the connection if the iOS device is in range and Bluetooth is switched on
- Reconnect is already available for Android devices

## 11 About the August 2018 release

### 11.1 Zeno Mobile v2.0

Build number: 1356

Release date: 21.08.2018

#### 11.1.1 List of features and functionalities in the latest version of Zeno Mobile

#### New Zeno Mobile Features at a Glance

##### 3rd party Android phone and tablet support

- Zeno Mobile will now run on your own Android phone or tablet.
- Compatible with Android versions 5,6,7 and 8.
- Zeno Mobile for Android phones and tablets is only available for download from myWorld.
- Please refer to myWorld for a guide with details on the new licensing approach for 3<sup>rd</sup> party devices.

##### New Zeno Mobile for Zeno 20

- As well as now being available on 3<sup>rd</sup> party devices, Zeno Mobile for Zeno 20 also takes advantage of all the new features, fixes and improvements in version 2.0.

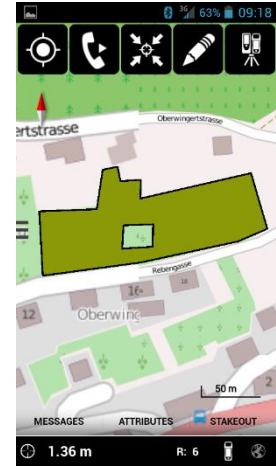
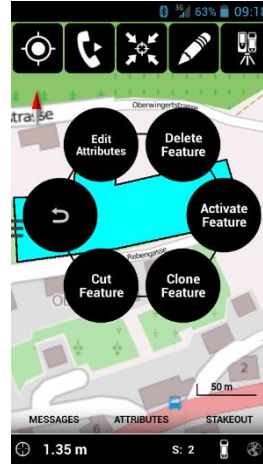
## GG04 plus Tablet Solution support

- Zeno Mobile runs on the Zeno Tab 1 Android tablet which is part of the new GG04 plus Tablet Solution.



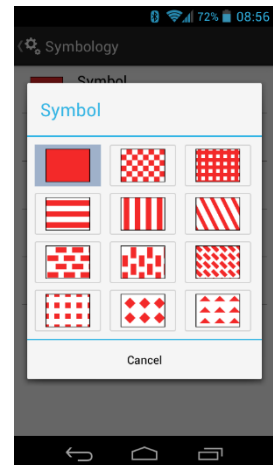
## New Cut feature

- The new cut feature allows polygons to be cut where they overlap or intersect.



## Improved symbology

- New point, line and polygon symbology options are now available.



## Updated Help

- The internal Zeno Mobile help has been updated.
- Please note – to read the new Zeno Mobile help on your device, if you do not already have one, download and install a .PDF viewer.

## Improvements and bug fixes

- Improved SBAS accuracy estimation.
- Estimated accuracy now shown in Android web browsers when configured using the Geolocation API.
- WMS server names with special characters now supported.

## Customer Care Packages (CCP's)

All customers with a valid CCP contract can install the new Zeno Mobile at no additional costs. The release date of the software is **21.08.2018**. It is important customers renew expired CCP's to install the latest version.



### **MyWorld**

The latest version of Zeno Mobile is also available to download from myWorld: <https://myworld.leica-geosystems.com/>



### **Notice**

As this release contains several improvements please make sure that every customer updates his current installation either over the air or via manual download from myWorld.

## 11.2 Leica Zeno Tab 1 & GG04 plus Tablet Solution release

Release date: 21.08.2018

### New Leica Zeno Tab 1 & GG04 plus Tablet Solution at a glance

#### Leica Zeno Tab 1

- Lightweight, ergonomic and easy-to-use Android 6 tablet. Designed to be used outdoors, the large, bright screen brings mapping to life and can be used in all weather conditions.
- Leica Zeno Mobile and Leica Zeno Connect both support the Leica Zeno Tab 1, allowing you to combine the tablet with the Leica GG04 plus to enable highly accurate GNSS data collection.
- It is highly recommended that the tablet Android firmware is updated before first use to ensure correct operation.



#### GG04 plus Tablet Solution

- Complementing the tablet with the Leica GG04 plus smart antenna and Leica Zeno Mobile app, you now have the ultimate GIS asset collection solution, all from one trusted provider. This lightweight, easy to use and accurate **Leica GG04 plus Tablet Solution** all-in-one package will boost your data capture productivity.



#### Notice

Leica Zeno Tab 1 related downloads and information can be found on [myWorld](#), on the [Leica Geosystems web page](#) or directly on the Getac homepage.

## 12 About the February 2018 release

### 12.1 Zeno Mobile v1.9

Build number: 1287

Release date: 16.02.2018

#### 12.1.1 List of features and functionalities in the latest version of Zeno Mobile

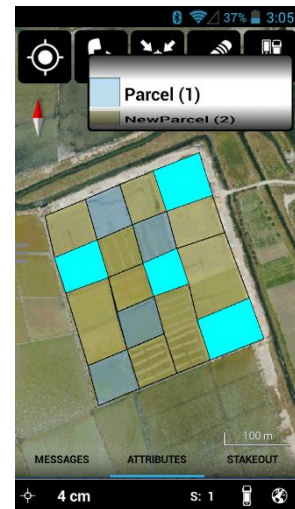
### New Zeno Mobile Features at a Glance

#### GG04 plus support

- The new Leica GG04 plus smart antenna is now supported in Zeno Mobile. All benefits of the GG04 plus antenna can now be utilized within Zeno Mobile.

#### Multi-part features supported

- It is now possible to import shapefiles that contain multi-part features.
- Zeno Mobile supports multi-part polygons and polylines.



#### Improved cable locator workflow

- A second workflow for the cable locator is now supported in Zeno Mobile.
- It is possible to measure buried utilities and send the measurement directly to Zeno Mobile, without the need to activate or create a feature class first.
- You only need to enter the offset between the Zeno 20 and the cable locator.

#### Improvements and bug fixes

- AS10/05 antenna selection. If you select AS10/05, you will only get a position if the antenna is plugged in correctly.
- Solved the issue causing features not visible in the map due to the use of a sim card.
- The multipart feature support solves the issue importing shapefiles with “donut polygons” or “island polygons”.
- KML: Pictures displayed better in Google Earth.

## 13 About the November 2017 release

### 13.1 Zeno Mobile v1.8.2

Build number: 1251

Release date: 14.11.2017

#### 13.1.1 List of features and functionalities in the latest version of Zeno Mobile

#### New Zeno Mobile Features at a Glance

##### New coordinate systems supported

- Ordnance Survey Great Britain 2015 CSCS and Geoid models now supported.
- New coordinate systems for Norway, Australia and USA.

##### Norway

Euref89 UTM 32,33 & 35

NTM Zone 05 - 30

##### Australia

GDA 2020 18 specific areas

GDA 2020 MGA Zone 46 – 59

GDA 2020 MRCG2020

GDA 2020 NSW Lambert

GDA 2020 PCG2020

GDA 2020 PHG2020

GDA 2020 SA Lambert

GDA 2020 VICGRID

##### USA

*All state plane zones:*

NAD 1983 CORS96 (Intl Feet)

NAD 1983 CORS96 (Meters)

NAD 1983 CORS96 (US Feet)

NAD 1983 NSRS2011 (Intl Feet)

NAD 1983 NSRS2011 (Meters)

NAD 1983 NSRS2011 (US Feet)

NAD 1983 PA11 Hawaii Zone 1-5 (Meters)

NAD 1983 PA11 Hawaii Zone 1-5 (US Feet)

## 14 About the October 2017 release

### 14.1 Zeno Mobile v1.8.1

Build number: 1236

Release date: 11.10.2017

#### 14.1.1 List of features and functionalities in the latest version of Zeno Mobile

#### New Zeno Mobile Features at a Glance

##### Improvements and bug fixes

- Fixed the Dropbox connection in Zeno Mobile issue due to changes made to the Dropbox API. Please note that the Dropbox connection will no longer work on all versions of Zeno Mobile prior to this 1.8.1 release.

## 15 About the September 2017 release

### 15.1 Zeno Mobile v1.8

Build number: 1227

Release date: 25.09.2017

#### 15.1.1 List of features and functionalities in the latest version of Zeno Mobile

#### New Zeno Mobile Features at a Glance

##### Extended attribute options

- Required attributes.
- Heritable attributes allow the first value entered to be retained for each feature created until the attribute is changed.

##### Improved point averaging

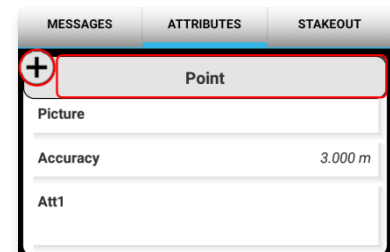
- It is now possible to enter a time in seconds for point averaging.
- There is no limit to the time entered so very long occupation times can be used for more accurate post processing.

##### New shortcuts in Attributes drawer

- Quickly display the wheel menu by tapping on the name of the selected feature in the attribute drawer.
- Quickly add more features using the plus icon in the attribute drawer (Zeno Mobile professional only).

##### Improved import and export of ASCII files

- It is now easier to import ASCII text files as a layer in Zeno Mobile.
- Files can be imported with a minimum of just X and Y coordinates.
- Special file encoding is no longer required.
- Different separators are now supported including comma, semi-colon and blank space.
- Normally invalid characters for attribute names and attribute values can now be used.





### Improvements and bug fixes

- Projects are ordered based on the modification date in the “Open Project” list.
- When creating a new project, the “base on project” is remembered from the previous choice.
- When creating a new project, the storage system (internal or SD card) is remembered from the previous choice.
- Cable locator support: It is now possible to select the unit of the depth field.
- Improved post processing results.
- Improved estimated accuracy display for L1 antennas.
- Fixed blue light occasionally blinking on GG04.
- CAD files that have built in offset are now displayed correctly.
- Improvements made to WMS compatibility.

## 16 About the June 2017 release

### 16.1 Zeno Mobile v1.7

Build number: 1168

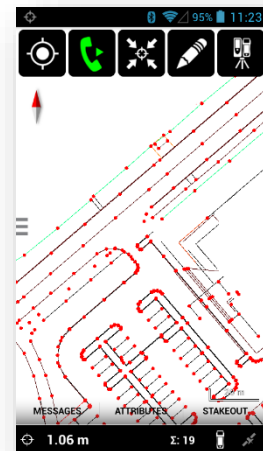
Release date: 01.06.2017

#### 16.1.1 List of features and functionalities in the latest version of Zeno Mobile

### New Zeno Mobile Features at a Glance

#### CAD support (read-only)

- DXF and DWG files can be added to Zeno Mobile and
  - displayed as background data.
  - used to stakeout points/lines.
- CAD data can be imported and used in a similar way to shape files.
- In this Zeno Mobile version CAD editing is not supported yet.



#### Raw data logging

- Raw data logging is now always active within Zeno Mobile projects.
- m00 files are created and saved in an observations folder within a Zeno Mobile project.
- In order to post process a Zeno Mobile project in Zeno Office, a new Zeno Office version will be required. This new version will be available in the coming weeks. Please ask for a Beta in urgent cases.

#### Symbology

- New symbology settings allow you to change the border colour and border thickness of points, lines and polygons.

### **Cable Locator Support**

- Support for Leica Ultra and Radiodetection RD8100 cable detectors.
- Pair devices via Bluetooth.
- Automatically transfer measurements to attribute fields in Zeno Mobile.
- Alter Z values of measured features based on their depth.
- Cable Locator support is only available in Zeno Mobile Professional.

### **Improvements and bug fixes**

- Stability improvement related to the camera: the device was crashing after almost 30 pictures
- KML: fixed the issue of wrong symbology with a specific user case
- KML: fixed the issue with layer name longer than 40 characters
- Improvement of the user interface with specific languages
- ASCII: Solved export issue due to the decimal separator
- Improvement in WMS support
- New symbology settings
- Coordinate Systems: fixed the issue of the “none” displayed even if a CSCS is being used.

## **17 About the October 2016 release**

### **17.1 Zeno Mobile v1.6**

Build number: 1097

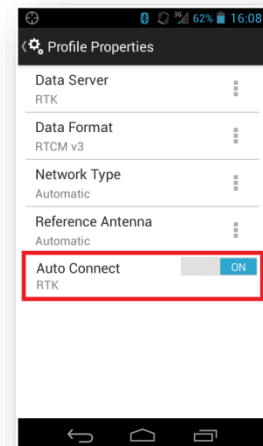
Release date: 03.10.2016

#### *17.1.1 List of features and functionalities in the latest version of Zeno Mobile*

## **New Zeno Mobile Features at a Glance**

### **GNSS Correction Auto Connect**

- As soon as you have a position, the selected RTK profile will be utilized to automatically.
- A switch allows you to disable this functionality if needed.
- The Auto connect is ON by default, you can switch off any time.



### **Attribute reordering**

- Drag and drop an attribute to a new position to reorder the attributes in the Attributes dialog.

### **Position Limits**

- Define quality limits to ensure certain accuracy for your measurements.
- Time and Distance limits are available.

### Streaming

- Continuously capture points/vertices. This is now possible using streaming mode based on time and distance intervals.



### From ArcGIS/Zeno Office to Zeno Mobile

- Define a data model in ArcGIS/Zeno Office  
So far Zeno Mobile projects had to be defined in Zeno Mobile or Excel only. Now an empty data schema can be generated in the GIS as well.
- Installation:
  - Download the **Zeno Data Model for ArcGIS** addin from my World (“tools” section in Zeno Field/Zeno Mobile/Zeno Connect).
  - Make sure Zeno Office/ArcGIS is closed
  - Double-click the addin to start the installation
  - Start ArcGIS/Zeno Office and load/generate your data
  - Supported data formats are shapes, file/personal geodatabases, dxf, dwg
- Right-click a layer and select Zeno Export
- For further information please refer to the “Zeno Data Model for ArcGIS\_Quick Guide”

### Improvements and bug fixes

- A more intuitive GPS setting allows you to enter antenna settings more quickly.
- New intuitive UI in the Zeno Mobile Notification Area showing solution type and GNSS correction.
- A notification informs the user when an invalid/unauthorized RTK connection is used.
- Improvements to WMS support.
- Improvements to import/export from/to SD card/USB.
- Pictures taken in Zeno Mobile are now also visible in the Android gallery
- Fix: The antenna icon in the notification area was not correct when the user changed the antenna type (AS05/AS10).
- Fix: On rare occasions layers no longer displayed in the project
- Fix: The Selection roll or the Wheel Menu were missing in certain workflows
- Major stability improvements and crash fixes.

## 18 About the June 2016 release

### 18.1 Zeno Mobile v1.5

Build number: 1069

Release date: 16.06.2016

#### 18.1.1 List of features and functionalities in the latest version of Zeno Mobile

### New Zeno Mobile Features at a Glance

#### WMS

- Zeno Mobile supports Web Map Services (WMS) now. Enter the credentials to a private or public hosted WMS and benefit of raster data in Zeno Mobile.
- There are many public WMS with high resolution aerial pictures available in the net.
- Support of various coordinate systems
- WMS data is cached automatically and can be used offline



#### USB device/SD card support

- Import data from a USB device/SD card to Zeno Mobile
- Export data to a USB device/SD card from Zeno Mobile
- This enables a more flexible workflow between field and office

#### Coordinate system improvement for Ireland and Northern Ireland

- Ireland: Select coordinate system “TM75 Irish Grid” or “TM65 Irish Grid” and the correct CSCS and Geoid are applied automatically to obtain centimetre accurate coordinates.
- Northern Ireland: Select “OSNI 1952 Irish National Grid” and the correct CSCS and Geoid are applied automatically to obtain centimetre accurate coordinates.
- Please note, this will work only for customers with shipping country “Ireland” or “Northern Ireland”

#### Improvements and bug fixes

- Minor stakeout improvements
- Fix for Arabic, Farsi, Latvian, Romanian and Turkish translation of Zeno Mobile
- Coordinate systems and help is updated now automatically with installing the latest Zeno Mobile release. Custom transformations are not overwritten.
- Before deleting an attribute or feature, the user has to accept a warning message.
- Fixes for shape files with capital letters in the extension (.SHP, .DBF, ...).
- All Zeno Mobile pictures include now geotagging information once geotagging is enabled in the Android camera options.
- Crash fixes

#### 18.1.2 Available Languages

Zeno Mobile is now available in 27 languages:

1. Arabic
2. Chinese Traditional
3. Chinese Simplified
4. Czech
5. Danish
6. Dutch
7. Farsi
8. Finnish
9. French
10. German
11. Greek
12. Hungarian
13. Italian
14. Korean
15. Latvian

16. Macedonian
17. Norwegian
18. Polish
19. Portuguese Portugal
20. Portuguese Brazil
21. Russian
22. Serbian
23. Slovakian
24. Slovenian
25. Spanish
26. Swedish
27. Turkish



→ if your language is not yet supported, please talk to [Alexander Fischer](#).

## 19 About the April 2016 release

### 19.1 Zeno Mobile v1.4

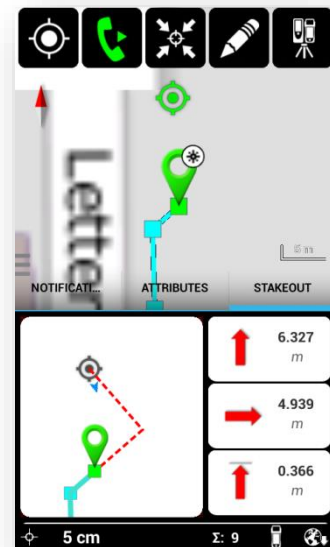
Build number: 1039

Release date: 14.04.2016

#### 19.1.1 List of features and functionalities in the latest version of Zeno Mobile

##### 19.1.2 Stakeout

- Walk the line!  
As the name already indicates, Zeno Mobile assists you to walk along line and polygon features. Activate a line/polygon and the Stakeout window informs about distance and direction between your current position and the line/polygon feature.
- Enter target coordinates.  
Define a target for the Stakeout by entering either local or WGS84 coordinates.
- Stakeout is available for Zeno Mobile Professional only.



##### 19.1.3 From MS Excel into Zeno Mobile

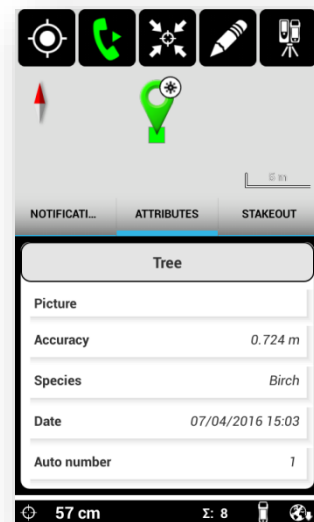
- Define a data model in the office.  
So far Zeno Mobile projects had to be defined in Zeno Mobile only. Now an empty data schema can be generated in the office as well.

- Download the **Zeno Data Model for Excel** spreadsheet from my World (“tools” section in Zeno Field/Zeno Mobile/Zeno Connect).
- Define your data structure:
  - Feature layers
  - Symbology
  - Attributes
  - Auto-Attributes
  - Copy/Paste list fields
- Export the data model and add it to Zeno Mobile.

Export Data Model							
Layers							
Name	System Name	Geometry Type	Symbol Color	Symbol Size	Name	System Name	Type
Tree	Tree	Point		15	Code	Code	Number
					Photo1	Photo1	Photo
					Photo2	Photo2	Photo
					Photo3	Photo3	Photo
					Name	Name	List

#### 19.1.4 Quick Attribute Input

Entering attributes required quite some clicks in Zeno Mobile so far. That's why we added a new way to enter attributes on the fly directly in the Context Window.



#### 19.1.5 Support of new coordinate systems and transformations

- Slovenia: New Slovenia D48 /GK and Slovenia D96/TM
- Czech Republic and Slovakia: New S-JTSK Krovak East North that can be used to export data to GIS and CAD.
- Turkey: New ITRF96 coordinate systems

#### 19.1.6 Improvements and bug fixes

- Various enhancements for gamtec in feet coordinate systems.
- Levelling of the compass is only required once it's really in use.
- Moving a vertex can be done only in case of enabling the edit mode. This prevents moving vertices accidentally.
- Further fixes and performance optimization.

#### 19.1.7 Available Languages

Zeno Mobile and Zeno Connect (Android) is now available in 27 languages (find new languages in bold):

1. **Arabic**
2. Chinese Traditional



3. Chinese Simplified
4. Czech
5. Danish
6. Dutch
- 7. Farsi**
8. Finnish
9. French
10. German
11. Greek
12. Hungarian
13. Italian
14. Korean
- 15. Latvian**
- 16. Macedonian**
17. Norwegian
18. Polish
19. Portuguese Portugal
20. Portuguese Brazil
21. Russian
22. Serbian
23. Slovakian
- 24. Slovenian**
25. Spanish
- 26. Swedish**
- 27. Turkish**

## **20 About the December 2015 release**

### **20.1 Zeno Mobile v1.3**

Build number: 994

Release date: 07.01.2016

This release includes new features and various improvements.

**Important note:** Please ensure that everybody **downloads** the new version from **myWorld** as this update also fixes some problems with the update over-the-air.

#### *20.1.1 List of features and functionalities in the latest version of Zeno Mobile*

#### *20.1.2 Stakeout*

- Stakeout is available for Zeno Mobile Professional only
- How to use?
  - Move the green pin on a point/vertex to define the stake out target
  - Verify the stake-out results (including offsets and estimated accuracy) and export a report as shape, ASCII or kml
  - Store staked out offsets directly in the feature class as attributes

#### *20.1.3 Auto Types*

This feature adds automatically values to your attribute fields. Depending on your geometry type following auto fields can be selected:

- Creation Date

- Modification Date
- Auto Number
- Accuracy (Point only)
- Area (Polygon only)
- Perimeter (Polygon only)
- Length (Polyline only)
- Offset (Point only)

**Please note:** Auto Type are not backward compatible.

- The new Auto Types function is not compatible with old Zeno Mobile version. A project created in this Zeno Mobile release, **cannot** be opened in a previous Zeno Mobile version.
- Data measured in feet will be converted to meters once it's exported to shp/ASCII/kml. This prevents confusion as no unit can be saved in these files.

#### 20.1.4 Position Usage

A new setting is available now. Define what Zeno Mobile should do when a measurement is done.

- **Create a new point:** When you tap the measurement button, a new feature or a new vertex of a feature is generated. That's exactly what happened in all previous Zeno Mobile versions. The cursor reflects this mode with a small asterisk.



- **Update position of active point:** Move the green pin onto the point/vertex you intend to update and tap the measurement button. Coordinates and accuracy values are updated according to the new GPS position.



- **Verify Position of active point:** Move the green pin onto the vertex you want to verify, tap the measurement button: a "Verified Point" layer is created. This new layer contains all the information related to the verification (Offsets to the target point, Height Accuracy, Position Accuracy, Modification Date, Picture). It is possible to save the dZ, dY, dZ offset values also in the original feature layer.



#### 20.1.5 Averaging

Averaging allows to specify the number of incoming GNSS positions that will be used to calculate an averaged coordinate.

#### 20.1.6 Support of international character sets

- Display and define attributes and layer names in e.g. Chinese/Arabic/Korean/Japanese/Cyrillic...
- Display layers generated in ArcGIS in various character sets properly in Zeno Mobile



### 20.1.7 Performance and Stability Improvements

- TRFSET.dat: When using a TFRSET.dat, the name of the coordinate system is now shown instead of the projection's name
- It's now also possible to add TRFSET.dat files based on WGS84 ellipsoids
- Import/Export:
  - A progress bar indicates the percentage of the process
  - It is now possible importing different kind of KML versions
  - Stability improvements for bigger projects/layers
- Attributes UI:
  - Generate/Edit attribute fields are more comfortable
  - The data type "Auto" is available now

## 21 About the October 2015 release

### 21.1 Zeno Mobile v1.2

Build number: 942

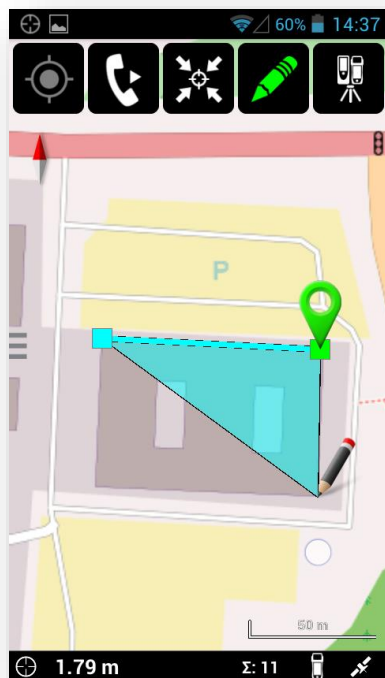
Release date: 29.10.2015

In addition to overall stability improvements and general bug fixes find the following new features coming with the new release.

#### 21.1.1 List of features and functionalities in the latest version of Zeno Mobile

##### Digitizing

- It is possible now to digitize point, line and polygon features (Multi Collect is also supported)
- Simply activate the Digitize Mode by tapping on the pen in the toolbar:
  - Tap in the map to digitise a point/vertex
  - Tap and hold for high accuracy digitizing.



## Performance and Stability Improvements

- Bug fix when importing TRFSET.DAT files.  
Please contact [Alexander.Fischer@leica-geosystems.com](mailto:Alexander.Fischer@leica-geosystems.com) in case you have used TRFSET.DAT imports in the past.
- The WGS84 coordinates are shown now with 5 digits.
- Improvement: When working with L1, the estimated position accuracy was displayed too pessimistic.
- The Translation factors and the scale can be entered with 4 digits, the Rotation with 5 digits.
- RTK arrow is now only flashing when RTK is actually received.
- Updating of Zeno Mobile:
  - From now on the update notification is shown in the Android notification drawer
  - Content of the new releases is displayed in the “What’s new” window.
  - Demo equipment can be updated now with latest versions of Zeno Mobile and Zeno Connect over the air.

## Release video

What’s new in this release? A video shows you all new functionalities

[https://www.youtube.com/watch?v=aYN8DyZGlrY&list=PL0td7rOVk\\_IWy-illnVd8axJvNt8i3NII](https://www.youtube.com/watch?v=aYN8DyZGlrY&list=PL0td7rOVk_IWy-illnVd8axJvNt8i3NII)

## Languages

Zeno Mobile is now available in the following languages:

- Chinese Traditional
- Chinese Simplified
- Czech
- Danish
- Dutch
- Finnish
- French
- German
- Greek
- Hungarian
- Italian
- Korean
- Norwegian
- Polish
- Portuguese Portugal
- Portuguese Brazil
- Russian
- Serbian
- Slovakian
- Spanish

## 22 About the September 2015 release

### 22.1 Zeno Mobile v1.1

Build number: 924

Release date: 14.09.2015

In addition to overall stability improvements and general bug fixes find the following new features coming with the new release.

#### 22.1.1 List of features and functionalities in the latest version of Zeno Mobile

##### Languages

Zeno Mobile is now available in the following languages:

- Chinese Traditional
- Chinese Simplified
- Danish
- Dutch
- Finnish
- French
- German
- Hungarian
- Italian
- Korean
- Polish
- Portuguese
- Portuguese Brazil
- Russian
- Slovakian
- Spanish

Just switch the language in the Android Settings, return to Zeno Mobile and find it running in your language.

##### Export data

- KML Export: Export layers and/or projects as \*.kml file to be imported and used within GoogleEarth.
- ASCII Export: Export layers and/or projects to ASCII to be used with any 3rd party CAD package.

##### Coordinate Systems

- New predefined coordinate systems available: New predefined coordinate systems have been added to enhance your choice. If the coordinate system you need is still not in the list yet, make use of the new Import functionality to build up your own list of favorites.
- Import Coordinate Systems from trfset.dat files: Now you can select not only pre-defined coordinate systems but also import coordinate systems from trfset.dat files. Trfset.dat files can be exported from LGO or Leica Infinity. Both offer full flexibility to create any coordinate system you need.
- Favourite coordinate systems: Select or import the coordinate system you need just once. It will automatically be saved to a list of your favorites. WGS 84 will always be available at the

top of the list.

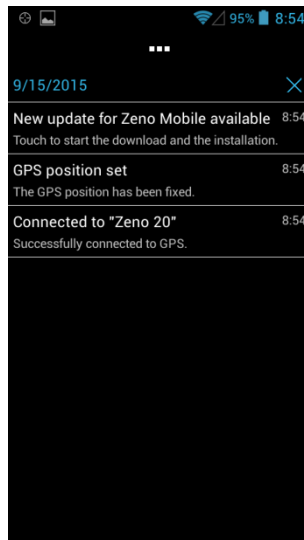
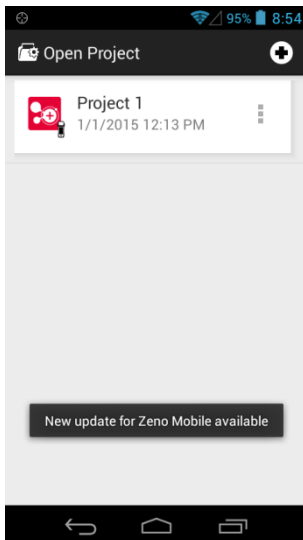
## Editing

- Activation of finalized features: You have already finalized a feature but realize then that you still need to edit its geometry? Simply tap and hold the feature to re-activate it or drag the green pin to one of its vertices.
- Moving vertices to known and unknown locations in the map: To modify the existing geometry of a feature just move its vertices to any place you want, be that its own vertices, vertices of other features or just any point in the map. If you move it to an existing vertex the new Snapping functionality makes it easy to hit the point.
- Cloning features: To quickly duplicate a feature simply clone it. Both features will share their vertices but can have different attributes. It's a neat alternative to quickly multi-collect features of the same type. Cloned features can be continued independently.
- Deleting features: Simply delete features that are outdated, erroneous or not needed any more and keep your project clean.

## Help

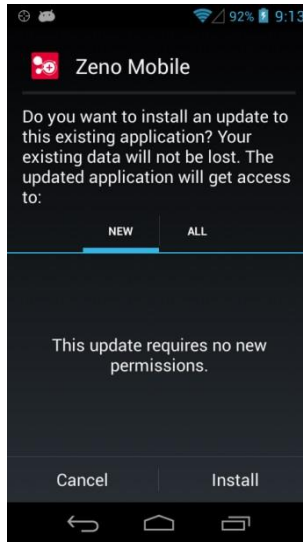
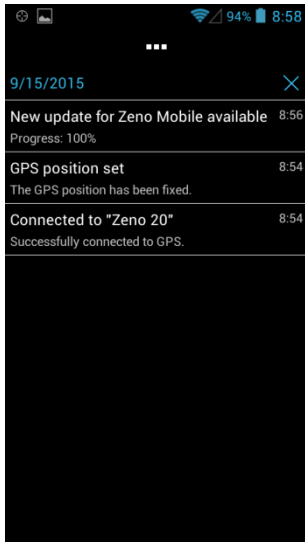
- Comprehensive Help on new functionality: To read more and learn about details of new and existing functionality in Zeno Mobile Help simply tap F1 on your Zeno 20 to open a comprehensive Help on all features. The Help is also always available via the Navigation Slider.

### 22.1.1.1 How to update Zeno Mobile/Zeno Connect on Android over the air



Every time a new update of Zeno Mobile is available and Zeno 20 has a mobile data connection activated, either via WLAN or via modem, you receive a message "New update for Zeno Mobile available".

To start the download of the new Zeno Mobile version, just tap on the message in the Zeno Mobile notification area.



Once the update is downloaded, tap on the message to launch the installation.

Tap the "install" button and the latest Zeno Mobile build will be installed on your Zeno 20.

In the same way it is also possible to update Zeno Connect on Android over the air.

## **23 About the July 2015 release**

### **23.1 Zeno Mobile v1.0**

Build number: 862

Release date: 25.06.2015

Can you imagine starting at a jobsite in a city that is excavating soil and not having solid and reliable information about the city digital data that identifies precisely where pipelines, telecom and water mains are located? In such an example, the reliable data needs to be collected beforehand. The source of the data, the mapping techniques, the accuracy and up-to-datedness of the collected data are essential and without them real dangers exist. And for sure, any mobile mapping solution should be easy for anyone to understand, eliminate errors, provide an automated workflow and make a novice also feel like an expert. An unmatched intuitiveness ensures that new users feel comfortable with the offering after minutes.

Therefore, as a world's first, the Leica Zeno GIS family guarantees a simplicity without limitations. Managing and maintaining assets, inspecting infrastructure, responding to emergencies and as-built and incident mapping – the Leica Zeno 20 offers you the best in its class soft- and hardware solution for your needs. You get exactly what you want and expect from an easy mobile GIS solution. Leica Zeno 20 consist of a GIS collector hardware (either with Android or Windows Embedded Handheld 6.5.3 OS), various field apps (Leica Zeno Field (WEH 6.5.3.), Leica Zeno Mobile (Android), and Zeno Connect (for supporting 3<sup>rd</sup> party apps on the Zeno 20) and Office Software (Leica Zeno Office and Leica Zeno Office on ArcGIS).

For Zeno Mobile, we plan to offer continuous releases and the software gets automatically updated. Please ensure you have a valid CCP to benefit from continuous product enhancements.

#### *23.1.1 Features of Leica Zeno 20 at a glance*

#### *23.1.2 The New GIS Collector Hardware*

## The most rugged and versatile GNSS/GIS Handhelds in the market



- Android 4.2.2 or Windows Embedded Handheld 6.5.3.
- High Accuracy Capable GNSS Board (sub-meter to cm accuracy)
- Dual core Texas Instruments OMAP 4470 1.5 GHz Processor
- 1 GB RAM
- 4 GB on-board iNAND - expandable via microSD card
- 4.7" FWVGA sunlight readable, capacitive multi-touch screen (Asahi Dragontrail strengthened glass, Brightness 600+ cd/m2)
- 8 MP Camera with Autofocus & LED flash
- Input/Output:
  - 1 x USB 2.0 port
  - 1 x micro USB client for data transfer and charging
  - Integrated audio and microphone
- Wireless LAN 802.11 b/g/n
- Bluetooth: Class 2 (10m), V3.0 in Android
- WWAN 3.8G GSM (Zeno 20 UMTS) or CDMA (Zeno 20 CDMA)
- Hot- swappable lithium ion battery (<7 hours when using internal modem & GNSS)
- Sand, Dust & Water Rating: IP67 (Dust: IEC-60529; Water: IEC-60529)

### 23.1.3 Leica Zeno Mobile

Build Number: 862

Leica Zeno Mobile is an intuitive to use GIS data collection software. □Zeno Mobile provides a revolutionary way to collect features, attributes and photos. There is no need of defining features in advance in the office. Simply charge the device, watch a few videos and you are ready to collect data. And in case you have to measure multiple features on one location, use the unique multi-collect functionality of Zeno Mobile Professional.

Please ask your local Leica representative for an evaluation license, in case you have not tried it out yet.

#### 23.1.3.1 List of features and functionalities in the latest version of Zeno Mobile

##### Map items

- High speed rendering engine to display vector and raster data in the map
- Background data
  - OSM
  - Hexagon Imagery Program (please note that the content of the HxIP is currently only available in the US)
- Gesture support
  - Pinch to zoom
  - Pan
  - Rotate
  - Zoom with single tap (made for stylus)
- Centre on GPS position

##### Zeno Mobile notification system

- Get information on
  - GPS connection state
  - RTK state

- Disto connection
- Available updates of Zeno Mobile
- Much more to come

## **RTK**

- For countries with a Leica SmartNet, pre-defined profiles are already customized onto Zeno 20. Just enter your user name and password and you're ready for high-accuracy
- RTK Wizard for easy creating RTK profiles step by step
- Connect to a RTK source via mobile Internet connection, Wi-Fi or Radio/Beacon

## **Sensor connection**

- Connect to internal high accuracy L1/L2 sensor
- Obtain centimetre accuracy by using an external antenna (AS05/AS10) without the need of defining anything. Just plug cable into Zeno 20, and the Zeno 20 will switch automatically.
- Reset GNSS receiver settings
- Define GNSS observations settings
  - Cut-off angle
  - Antenna Height
  - Antenna Info
- Easy connection to GG03/GG02 plus, in order to work cable free.

## **Units**

- Choose between following units
  - Meters
  - U.S. survey feet
  - International feet
- Units are visible and used @:
  - Notification area (Status Bar)
  - All settings dialogs
  - Scale bar
  - Accuracy displayed
  - Disto
  - Coordinate System

## **Licensing**

- Online: License Zeno Mobile over the air once you have ordered e.g. an upgrade
- Offline: License keys by browsing them or typing them in
- Zeno Mobile comes pre-installed and pre-licensed on the Zeno 20

## **Automatic update over the air**

- Download no longer manually an installation file from myWorld
- Whenever there's a Zeno Mobile update available and your CCP is valid, it can be downloaded over the air.
- This functions is extremely helpful as we plan very frequent Zeno Mobile releases in the future

## **Dropbox – Connect to the cloud**

- Add projects/layers to Dropbox
- The Dropbox functionality is embedded into Zeno Mobile, no need of downloading an extra app.



- Log in once and you will be able to upload and download projects to/from Dropbox
- Share easily data between field and office
- Set up projects on one device and share them to multiple devices via Dropbox with some taps

#### **Collect features the Zeno Mobile way:**

- Always take the measurement first, assign afterwards the feature class
- The Feature Tag gives information on the feature that was just measured
- Context sensitive Wheel Menu: Benefit from the slim UI and choose between options that matter at the moment.
  - Edit Attributes
  - Change Feature Class
  - Edit Geometry
  - Finalize Feature
  - Obtain coordinates from measured point
- Not...? Command: What can be easier than just saying Not...?
 

Once you intend measuring a feature of a different feature class tap the “Not...?” button” in the Wheel Menu and choose between your existing features class or define a new one.
- Always have an eye on your coordinates. Tap the accuracy button in the Wheel Menu and receive coordinates of your measured point in WGS84 and the selected local coordinate system
- Intuitive way of changing a feature’s geometry
  - Move the pin on a line’s or polygon’s vertex to adjust its geometry
  - Append vertices to a feature
  - Insert vertices to a feature
- Multi Collect:
  - Take a single measurement and assign multiple feature classes to the measurement
  - Reduce time/walking distance
  - Have topological correct points this way
- Notification Area: All important information on one place
  - Fix-Type
    - Navigated solution
    - Code-Fix
    - Phase-Fix
  - Accuracy
  - Number of satellites
  - Antenna in use
  - Selected RTK source
- Support of hard key buttons:
  - Take measurements
  - Connect/Disconnect to RTK
  - Take pics
  - Open help

#### **gamtec**

- Take offset points in an accuracy similar to GPS.
- Angles are not obtained from inaccurate electronic compasses, they are defined by accurately measured directions.
- Take only a single orientation measurement and you’re ready for offset measurements.
- Totally embedded workflow in the most intuitive way

- Automatic connection between Zeno 20 and Disto S910 (manual connection must be done only once)
- Switch easily between Disto S910 measurement and measurements done with GPS only

### **Rich Coordinate System support**

- Support of hundreds of different coordinate systems worldwide
- Support of Geoid and CSCS files
- Completely new way of working in local coordinate systems. Made for non-experts
- Switch between coordinate systems whenever you want. Projections and transformations are done on the fly!
- E.g. Start first in WGS84 (default) and select after a while your favourite coordinate system. Data is recalculated on the fly
- Add shape files in different coordinate systems. Zeno Mobile will take care for matching them

### **Project Management**

- Define new projects with a few taps only
- Add projects from Dropbox
- Send projects to Dropbox
- Edit projects (name, coordinate system)

### **TOC**

- See what layers are in your projects
- Support of Android gestures
  - Swipe through TOC
  - Move layers to different positions
  - Delete layers
- Add layers from/Send layers to
  - Dropbox
  - Other projects
  - Download folder (to bring it to your PC)
- Define features symbology
  - Colour
  - Size
  - Width
- For more information, visit the Zeno Mobile Help installed on the Zeno 20.

### **Note:**

- Zeno Mobile and Zeno Connect should not be installed on a Zeno 20. For using Zeno Mobile and Zeno Connect functionality both together, please install Zeno Mobile and license it additionally with a Zeno Connect license. Now both, Zeno Mobile and Zeno Connect functionality will be available.
- Hexagon Imagery Program. Data is currently only available for parts of USA.