Presented By: Markus Koper

Trimble's - Fit-for-Purpose Land Administration Solution

Land registry and tenure data collection



Markus Koper

- Dipl-Ing. Surveyor
- Based in Bochum, Germany
- 42 years old
- 10 years with Trimble
- Business Development
- Trimble Land Administration
- Cadastral Solutions team





Fit-for-Purpose challenges / problems

- Registering the billions of undocumented land parcels and land rights worldwide, in a meaningful time frame, requires new approaches
- Available solutions:
 - High accuracy survey hardware and software with high upfront cost and significant learning curve are not suitable for FFP efforts.
 Solutions are not designed for mass land registry and tenure data collection
 - Simple products in hardware and software offers limited capabilities, do not address accuracy better than "Meter". Inefficiencies in workflows and future verifications. Limited sustainability and reliability.



Trimble's Fit-for-Purpose Solution



PENMAP ANDROID DATA COLLECTION Land Registry Software

Field data collection for everyone Easy to use, map based, STDM / LADM compliant



ANDROID OS FIELD DEVICES Affordable Data Collectors

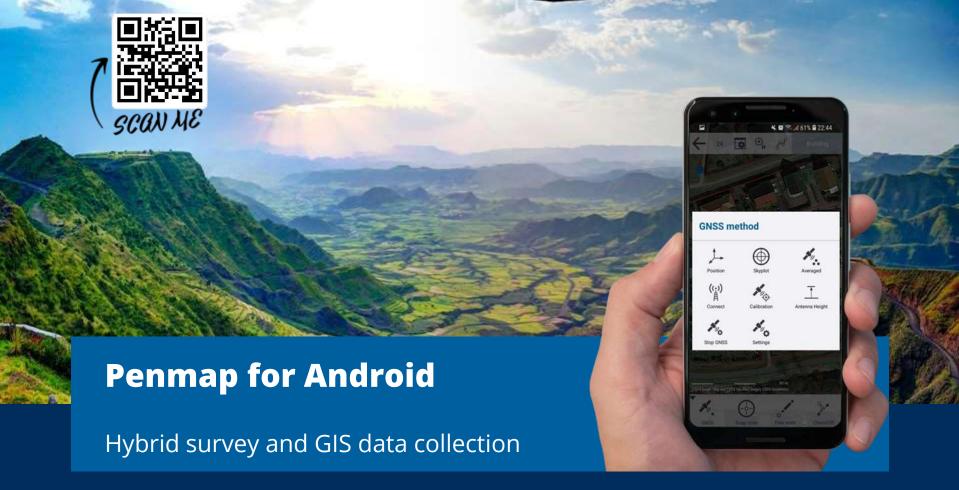
Bring Your Own Device - Android devices are inexpensive and offers a performance and flexibility



TRIMBLE CATALYST GNSS Positioning Concept

Low cost GNSS antenna and correction service on demand - worldwide







Trimble Penmap Android

Land Administration Data Collection

- Easy to Use
- Flexible
- Background Data
- Collect & Edit
- GNSS
- STDM / LADM





Data Workflow



Sync & Update

Trimble's FFP Solution



Data Formats and Exports

- Background Maps
- Import / Exports
- Database Connectivity
- Customized Exports

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THE REPUBLIC OF TRIMBLE THE LAND ACT, CAP. 887 The Land Regulations, 2021 DISTRICT LAND SOARD

CERTIFICATE OF CUSTOMARY OWNERSHIP

PART I: DESCRIPTION OF LAND

1. LOCATION 2. AREA

Approximate area.

3.406;4 m²

PART II: OWNERSHIP

nucture: 100

Teoure type	stern	NAME:	day of birth	
Dener	50	Gertand, Herman	2021-07-21	
Relative of	50	Larreck, Ata	2021-07-21	





21,7,2021



OWNER'S COPY



Land registry & Legal data collection

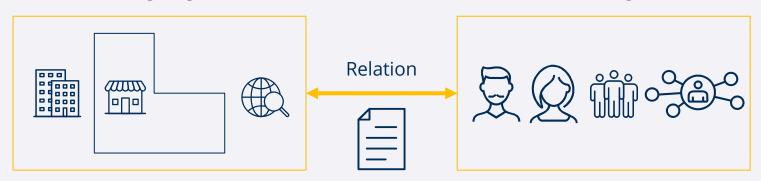
Spatial Data - Non Spatial Data - Relationships

SPATIAL DATA:

Parcels, Buildings, Agriculture Fields etc.

NON-SPATIAL DATA:

Persons, Parties, Legal Entities etc.



Map: Graphic and GIS data

Formbased - Table data

Relationship 1:n

Owner, Tenant, Share etc.





Android OS Data Collectors

EQUIP MORE CREWS
WITH DATA COLLECTORS

Affordable

Multiple form factors

- Tablets
- Smartphones
- Ruggedized smartphones

BYOD - Bring Your Own Device









Trimble Catalyst -GNSS Positioning-as-a-service

DA2 - GNSS Receiver

AND

Trimble Correction Service

- Worldwide available
 - In connected and unconnected areas
- Scalable for individuals, small teams, and large crews
- Inexpensive, Flexible
- Simple to use Plug and Play





Trimble Catalyst - Options







Catalyst 30 ~30 cm



Catalyst 10 ~10 cm



Catalyst 1 cm-Level



Catalyst On Demand cm-Level

Catalyst Accuracy Levels
Monthly / Yearly

Catalyst On-Demand hourly



Trimble Catalyst - Correction Service

Via Satellite Result in **Penmap**: "Precise Fixed" **GNSS** position

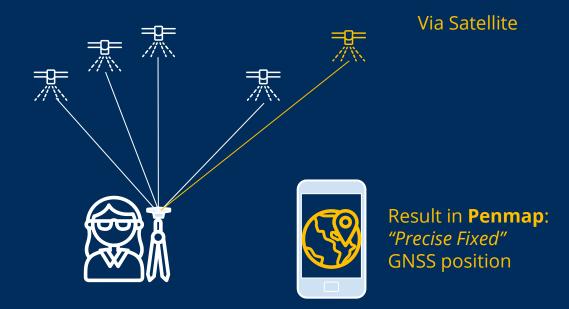
Via Mobile Network

Trimble Catalyst provides GNSS corrections

Worldwide available via mobile network or satellite



Trimble Catalyst - Correction Service



Trimble Catalyst provides GNSS corrections via **satellite**

Worldwide available



How will it feel to press this button?



EASY TO USE - Worldwide available - SIMPLE PRECISE



Get in touch with Trimble Land Administration team

Direct Contact:

https://ffp.trimble.com/







Thank You

Trimble Land Administration

For Questions or Feedback please contact: markus_koper@trimble.com

Trimble Fit-For-Purpose webpage: https://ffp.trimble.com/



