



# EUREF 2018 SYMPOSIUM

AMSTERDAM 30 May – 1 June 2018





# Fit for Purpose Land Administration

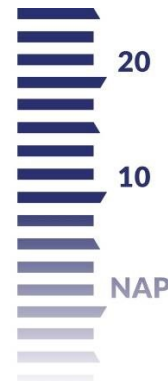
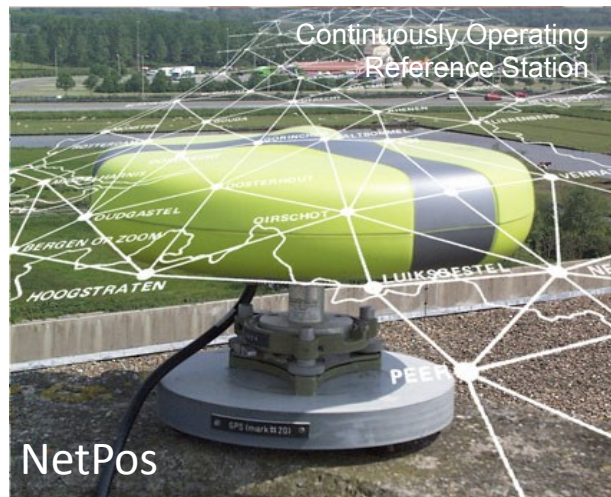
KEES DE ZEEUW – Director Kadaster International



# Welcome in the Netherlands



CORS and sub-decimeter precision

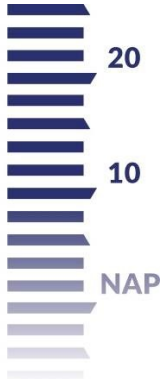
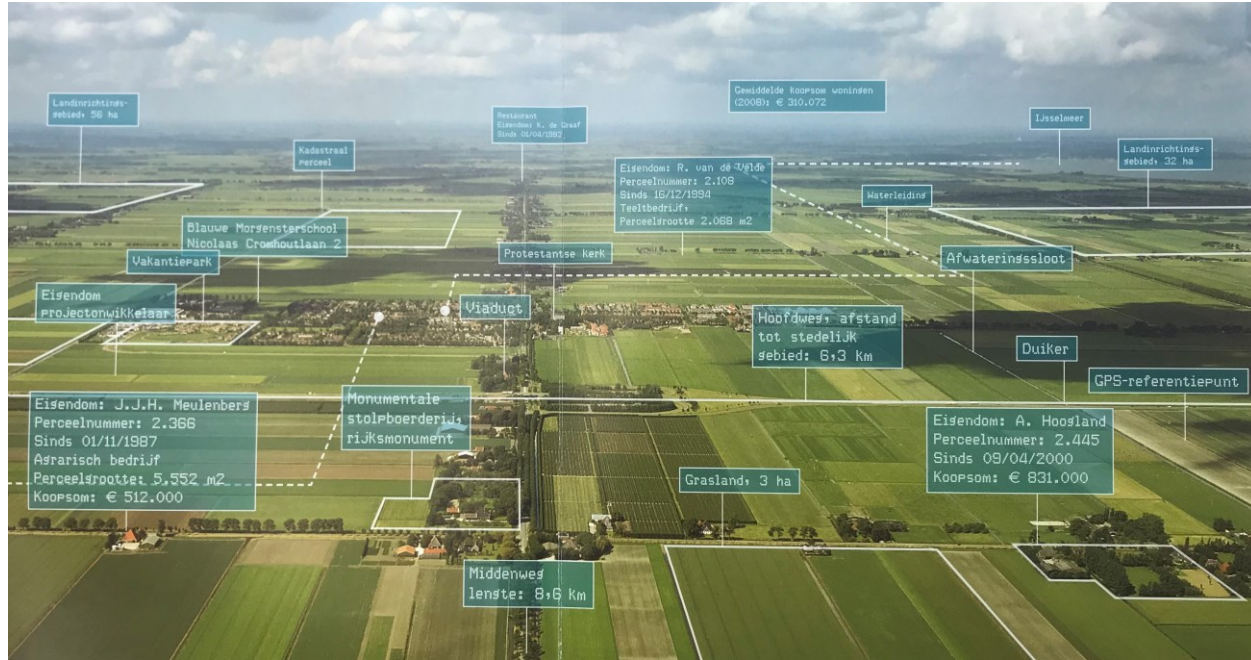


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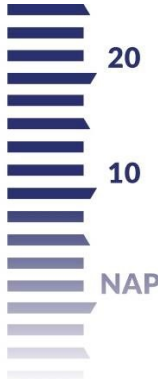
# Fit for our purpose



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# Land administration in the world



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# Land rights



Slums



Customary rights



Common lands



Private property



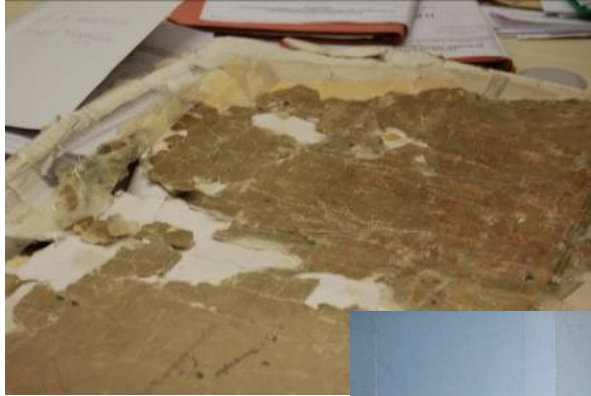
State lands



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# Cadastral maps and land registries





# State of play

	Total	SSA	ECA	LAC	MNA	OECD	SAS	EAP
Private plots in city registered	0.22	0.04	0.32	0.03	0.14	0.68	0.25	0.24
Private plots in city mapped	0.46	0.13	0.60	0.31	0.48	0.97	0.25	0.52
Private plots in country registered	0.22	0.04	0.32	0.03	0.14	0.68	0.13	0.24
Private plots in country mapped	0.24	0.02	0.40	0.03	0.14	0.71	0.13	0.28
No. of countries	189	47	25	32	21	31	8	25

Source: K. Deininger – World Bank (2017)

SSA – Sub-Sahara Africa

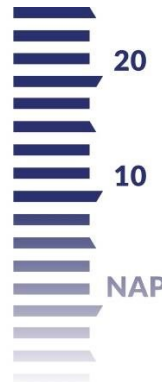
ECA – Europe and Central Asia

LAC – Latin America and the Caribbean

MNA – Middle East and North-Africa

SAS – South Asia

EAP – East Asia and the Pacific



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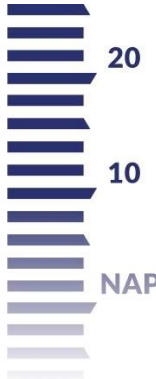
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# Sustainable Development Goals (2030)



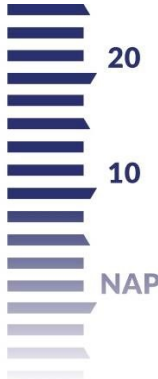
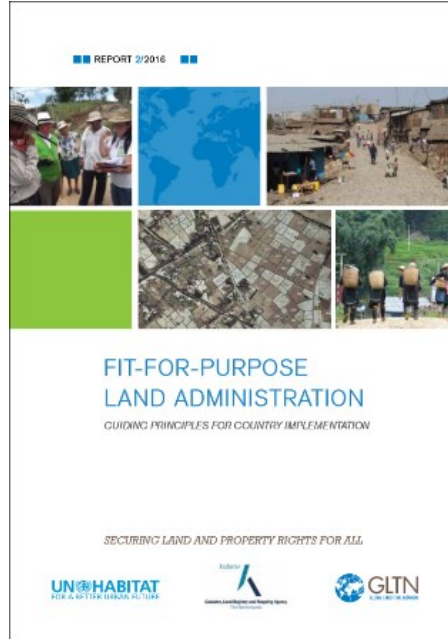
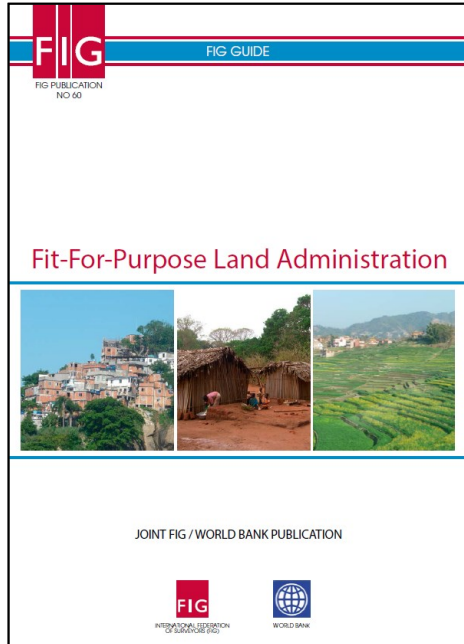
**THE GLOBAL GOALS**  
For Sustainable Development



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# Fit For Purpose Land Administration



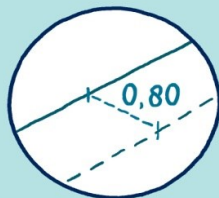
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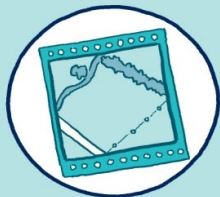
## KEY PRINCIPLES



visual  
boundaries



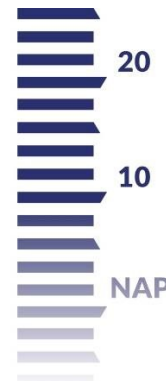
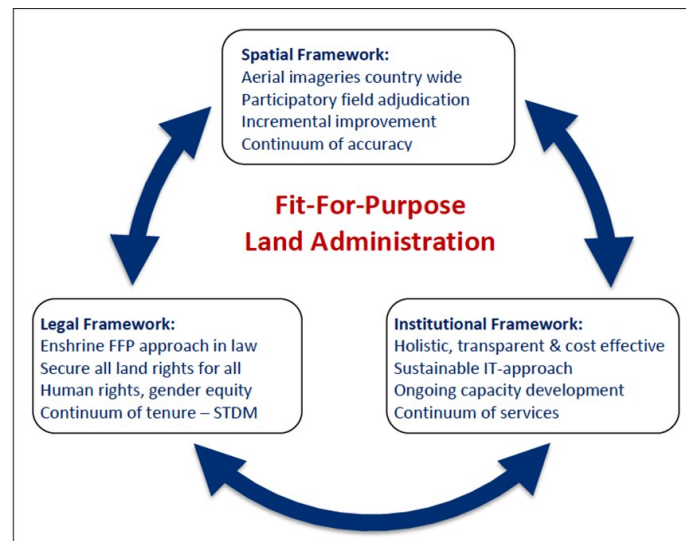
accuracy relates  
to the purpose



aerial imageries  
rather than  
field surveys

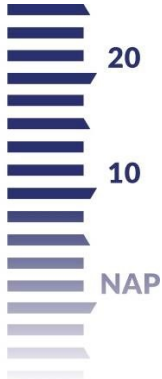


opportunities  
for updating,  
upgrading and  
improvement



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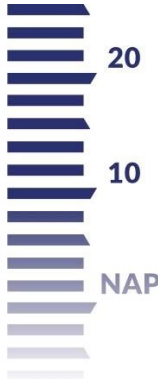
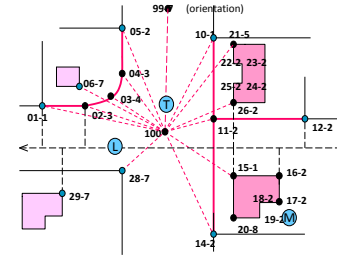


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# The need for geo-referencing



We offer three kinds of service:

**GOOD - CHEAP - FAST**

You can pick any two

GOOD service CHEAP won't be FAST

GOOD service FAST won't be CHEAP

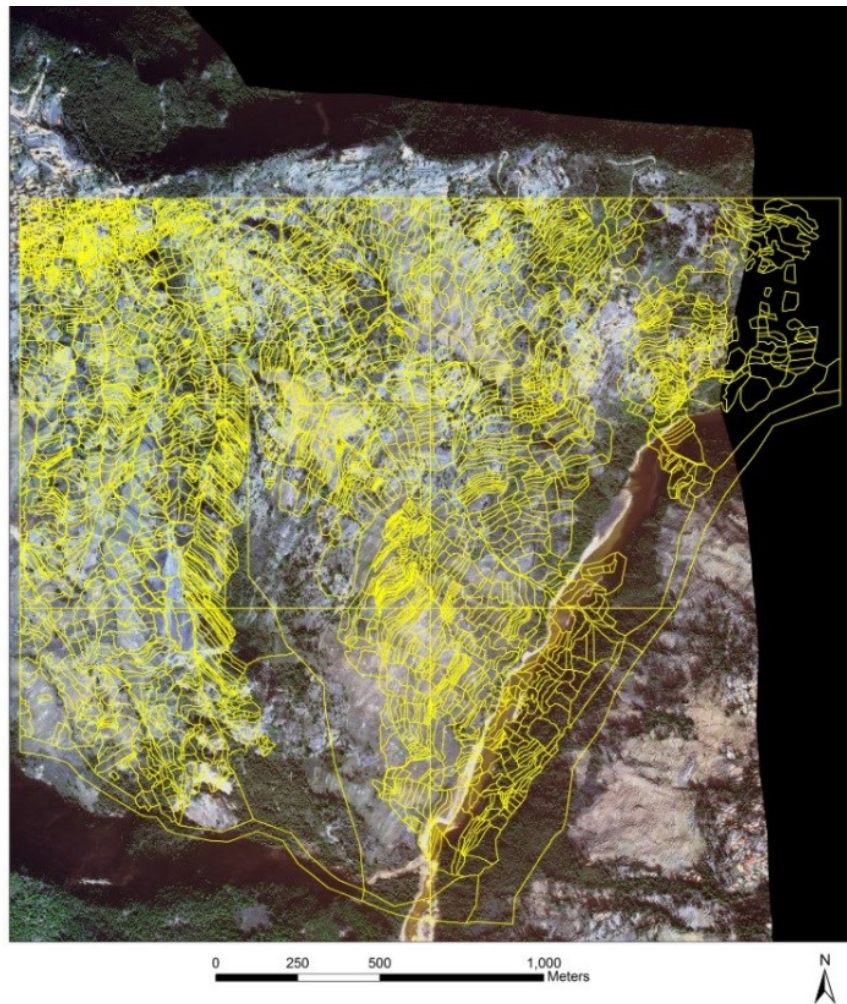
FAST service CHEAP won't be GOOD



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We offer three kinds of service:  
**GOOD - CHEAP - FAST**  
You can pick any two  
GOOD service CHEAP won't be FAST  
GOOD service FAST won't be CHEAP  
FAST service CHEAP won't be GOOD



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We offer three kinds of service:

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**GOOD** service **CHEAP** won't be **FAST**

**GOOD service FAST won't be CHEAP**

**FAST service CHEAP won't be GOOD**



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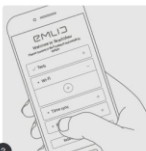




1  
Fix it on a rod/tripod and  
connect the radio antenna



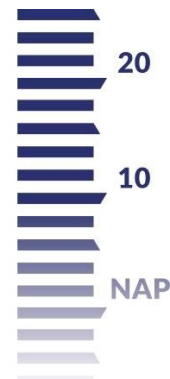
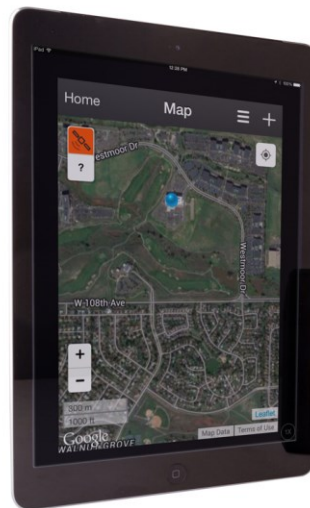
2  
Hold the power button for 3  
seconds to turn Reach RS on



3  
Connect to your Reach RS  
and open the ReachView  
app



4  
Configure the Rover-Base  
connection



We offer three kinds of service:  
**GOOD - CHEAP - FAST**  
You can pick any two

GOOD service CHEAP won't be FAST  
GOOD service FAST won't be CHEAP  
FAST service CHEAP won't be GOOD



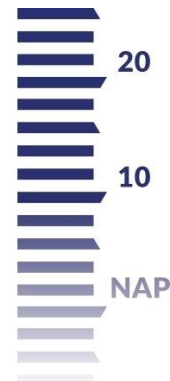
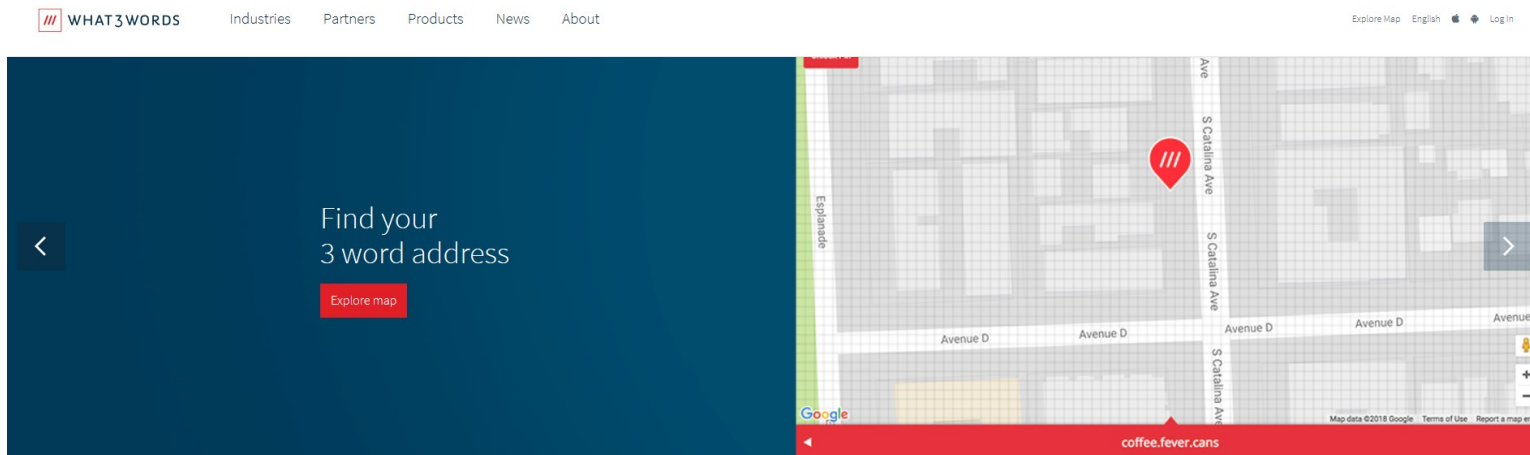
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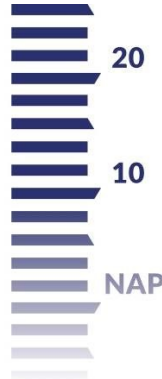
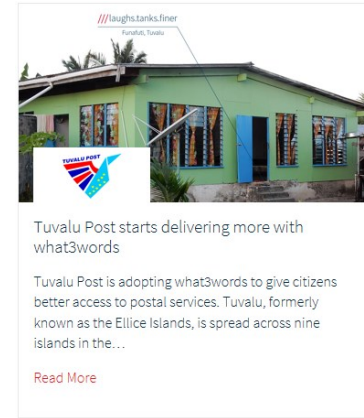
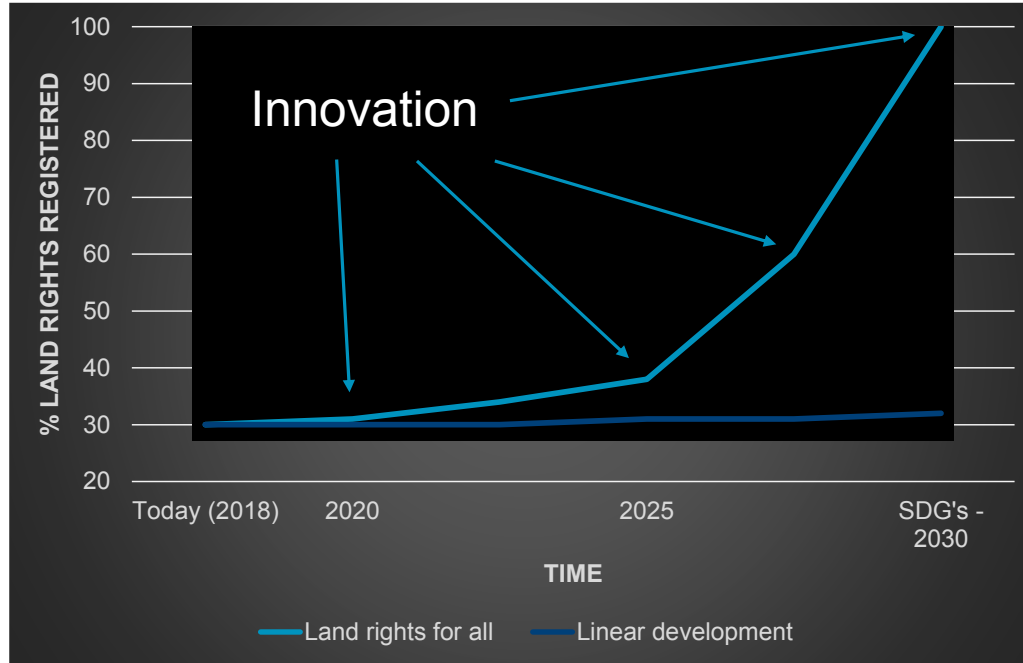


# Fit for Purpose in geo-referencing?



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# Need for innovation

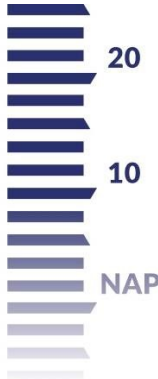


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# Innovation in the geo-spatial framework

- Participative GPS measurements
- Automatic Feature Extraction
- Crowd sourced data
- Satellite imagery
- Drones / UAV's
- Sensor networks
- ... ?

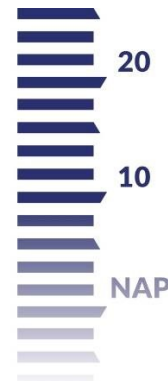


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# Conclusions

- Land rights for all (SDG's, 2030)
- Spatial frameworks needs geo-referencing
- Fit for Purpose Land Administration
- Need for innovation in geo-referencing



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kadaster



kadaster