

FIG

FIG WORKING WEEK 2017

Helsinki Finland

29 May - 2 June 2017

Presented at the FIG Working Week 2017,
June 2, 2017 in Helsinki, Finland

Application of Internet+ Field Survey Technology in China's Land Management

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China Land Surveying and Planning Institute

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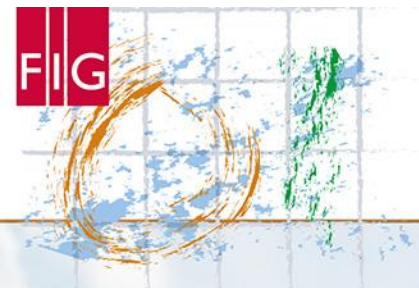


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Contents

- ▶ **What we have done in land survey?**
- ▶ **Why we do it in land survey?**
- ▶ **How we do it?**
- ▶ **The application cases.**



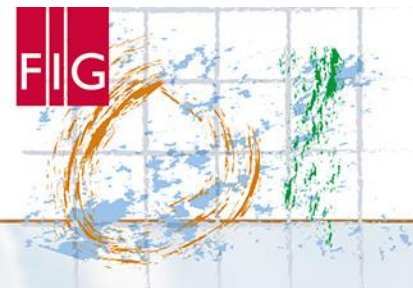


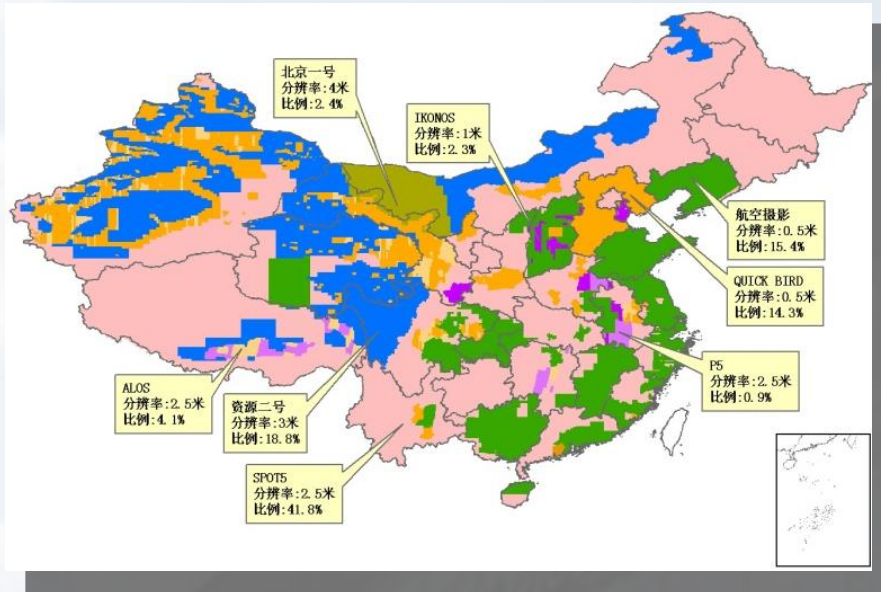
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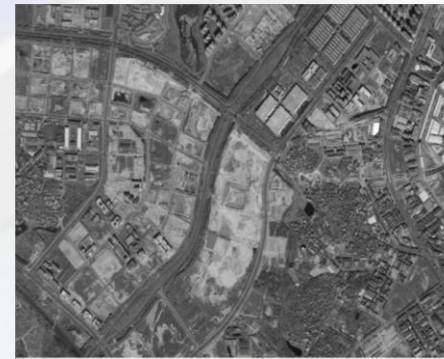
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Background: China Annual Land Use Change Survey.



1.State purchase remote sensing data.



2.State monitor land use change.



3.Local carry out land survey.



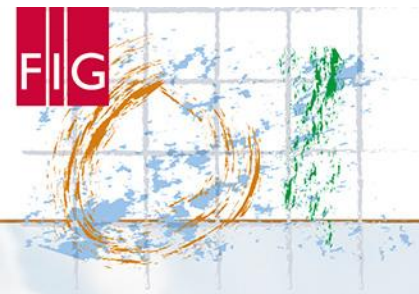


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◆ 1. What we have done in land survey?

- ▶ The design and implementation of Internet+ field land survey technology.
- ▶ Application in China's land survey and illegal land use inspection.
- ▶ Integration of survey information acquisition and quality inspection.



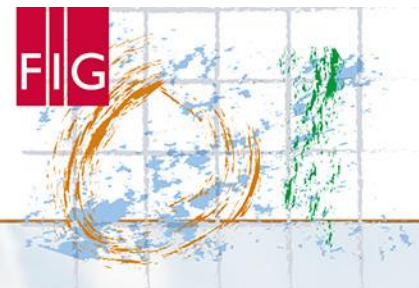


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◆ 2. Why we do it in land survey?

- ▶ **Benefit game between central and local government**
- ▶ **Low timeliness and high cost caused by multiple inspections and repeated verification**
- ▶ **Requirements of land survey: Authenticity, Accuracy, Speediness, and Efficiency**

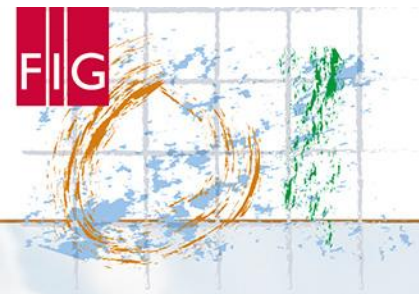


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◆ 3. How we do it?

- ▶ **Five-element proof provision: Person, Time, Device(smart phones), Coordinate, and Direction.**
- ▶ **Mobile Internet, cloud services, and 3S (RS/GIS/GPS) integration technology.**
- ▶ **Survey and proof information are encrypted and transmitted over Internet and then stored on cloud servers.**



Technical Process of Internet+ Proof in Land Survey



Local



PHONE+APP

Cloud



State

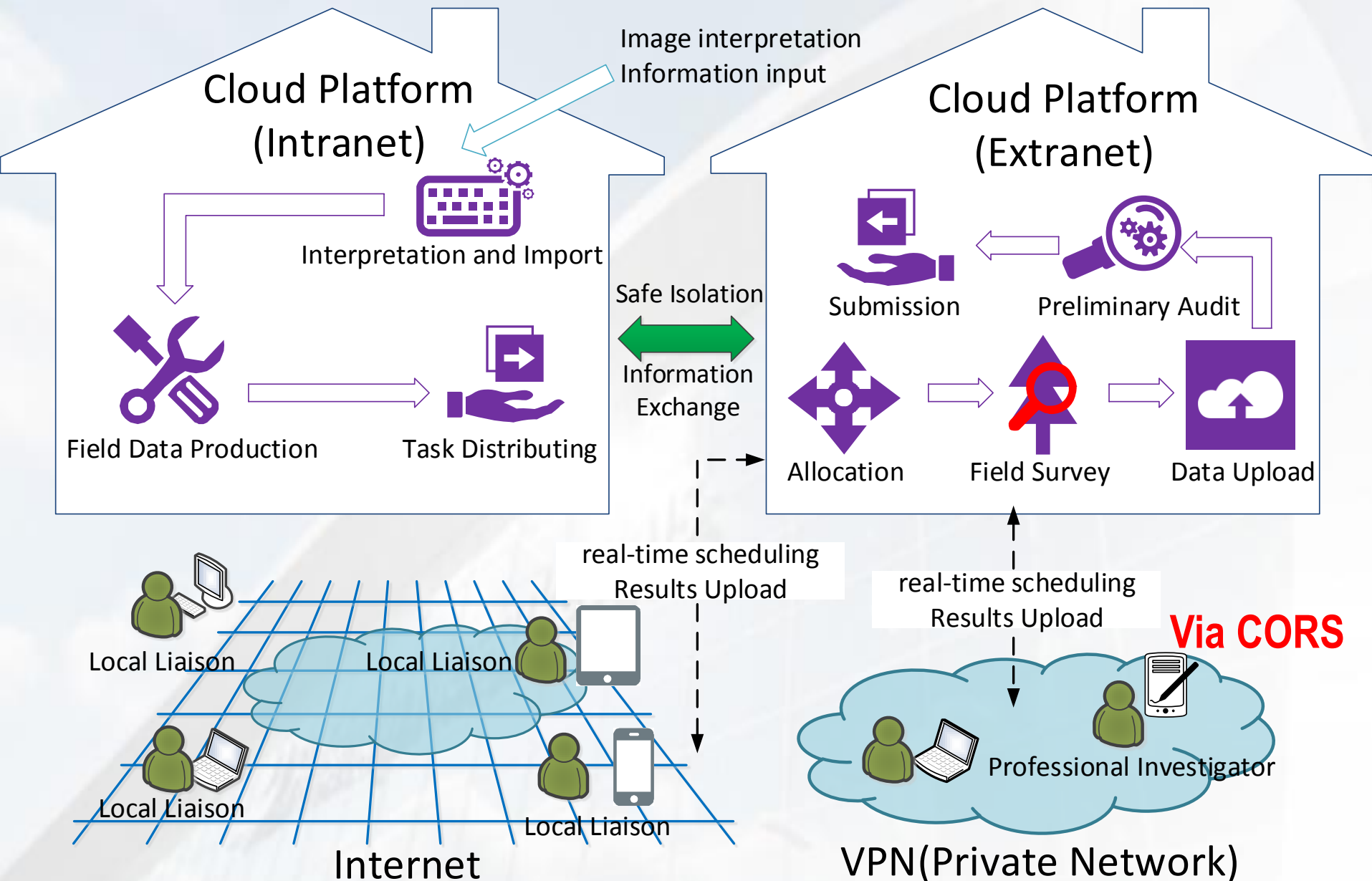


拍照人员：大足郑知喜 拍照时间：2016/6/2 14:19:14
拍照角度：北偏东13°(未知精确拍照位置) 经度105.7634° 纬度29.69°

PACKETS OF PROOF



Overall Technical Framework for Internet+ Land Survey



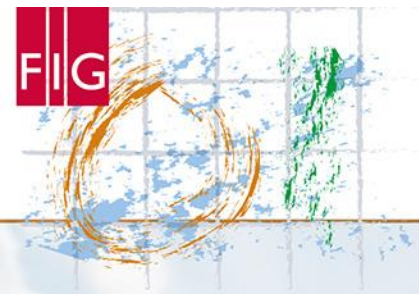


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◆ 4. The application cases.

- ▶ The field survey and verification of the land use in 2016
China Land Survey.
- ▶ The field verification, proof provision, and review of
suspected illegal land use in China land management.



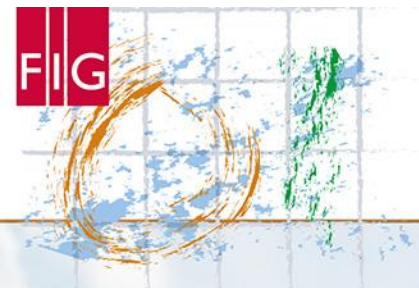


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—The End—
Thanks!

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