Australian Government
Geoscience Australia

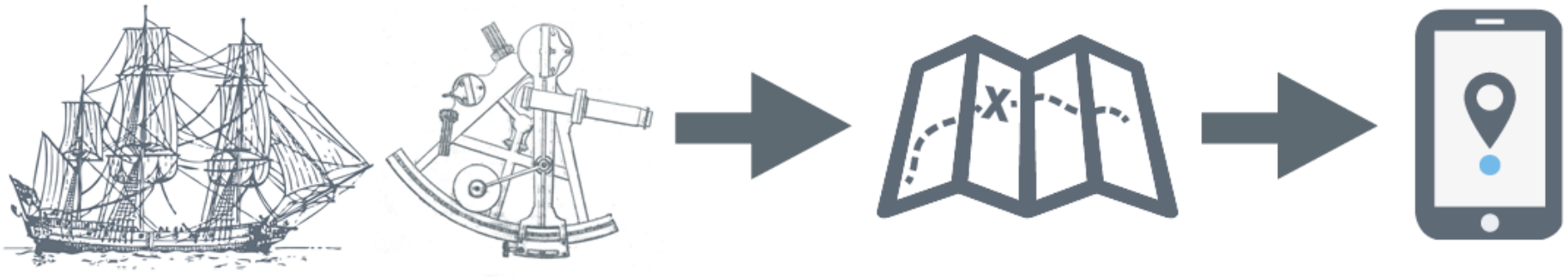
Satellite Positioning: a key element of Australia's digital future

Gary Johnston, Branch Head Geodesy and Seismic Monitoring

Australia

- Population: 24 million
- Industry: Mining, Services, Construction, Agriculture, Manufacturing
- For Industries, after wages, transport is the next biggest outlay at 10%

Importance of Positioning

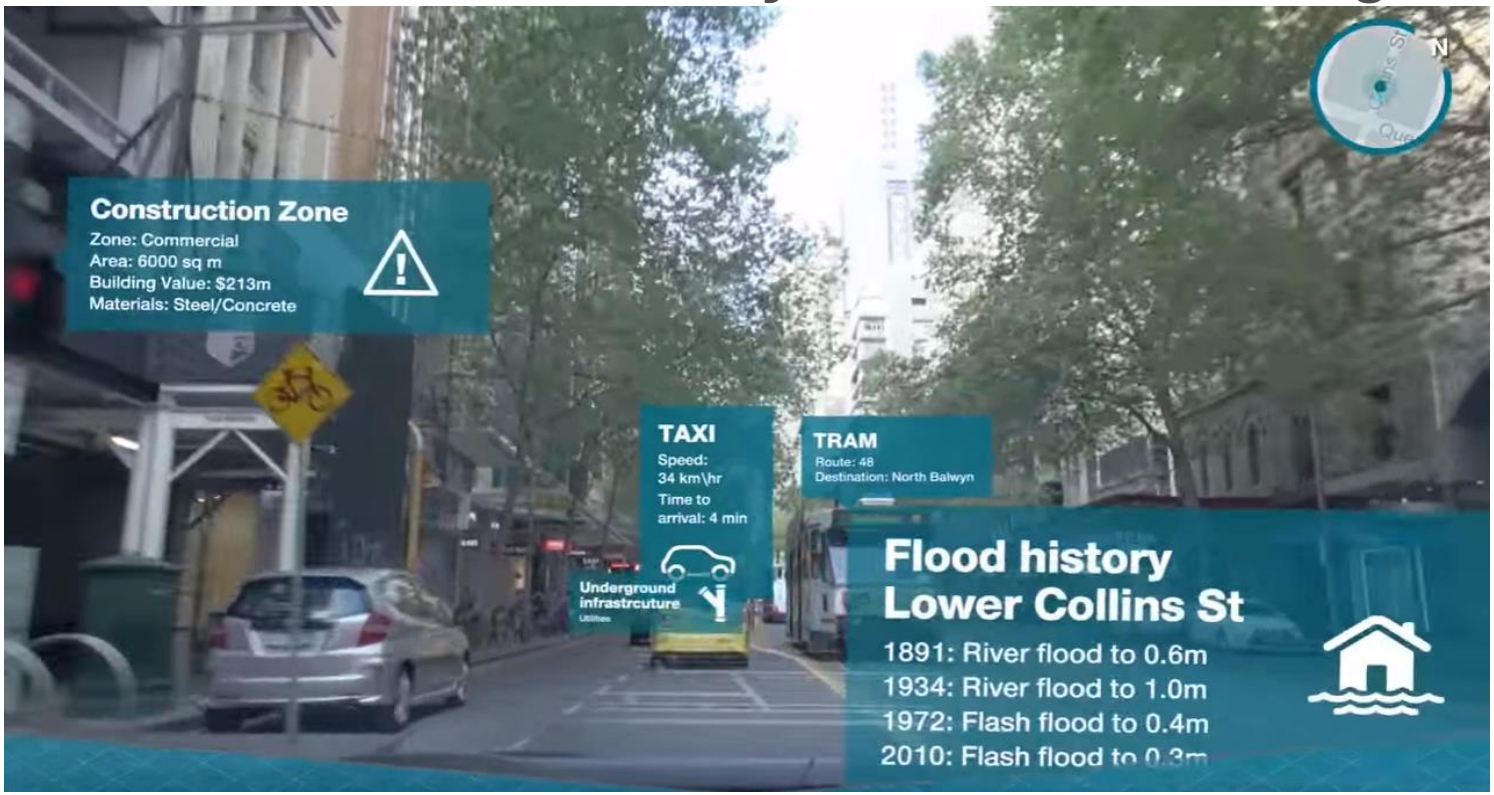


Positioning: Foundation of the Digital Economy

Big Data

Augmented Reality

Multimodal Logistics

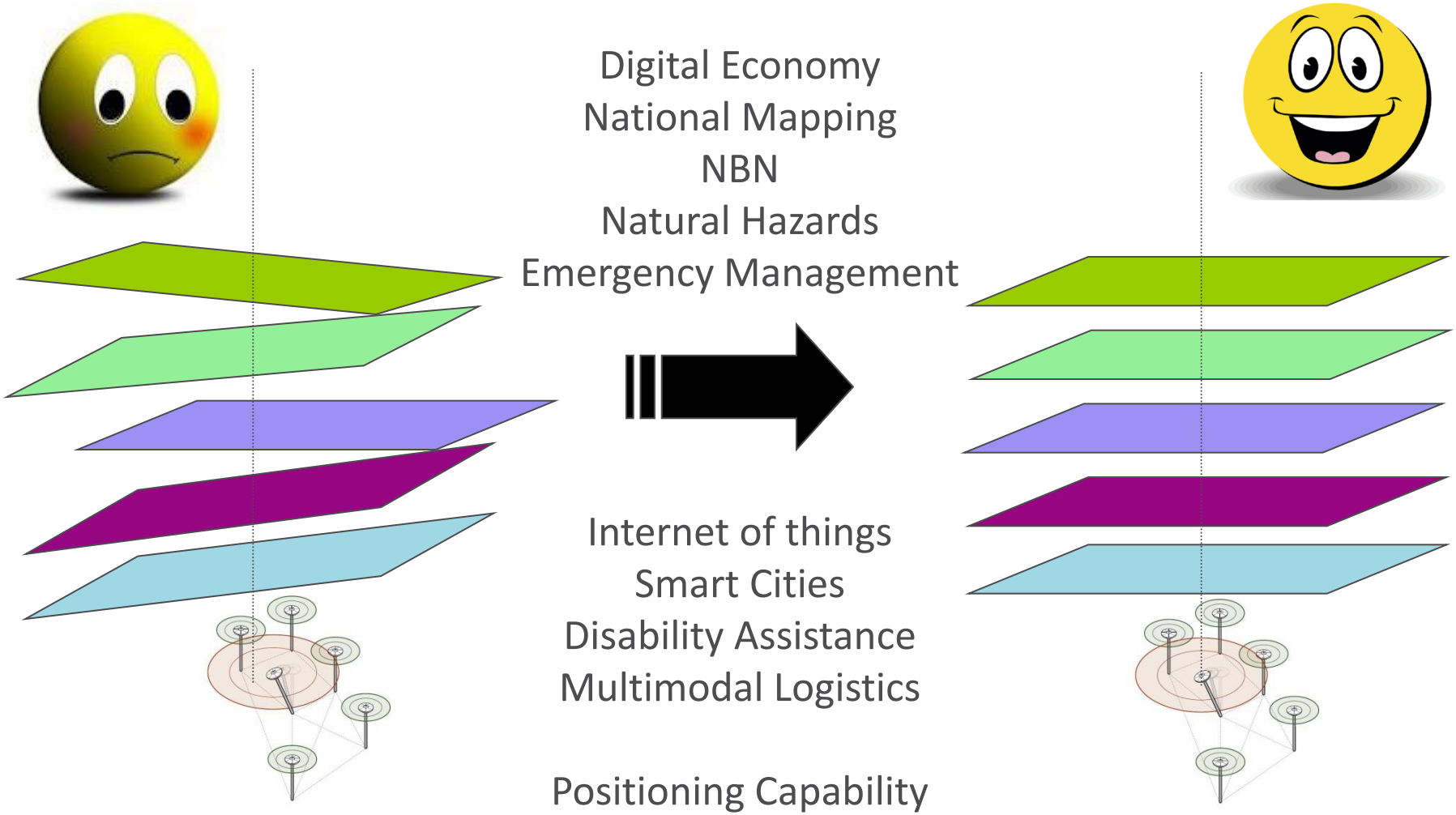


Smart Cities

Internet of Things

Disability Assistance

Importance of Positioning to the Australian Government



~$1.1b

Adopting precise positioning technology in the mining industry was estimated to have increased output by $1 085 million in 2012 alone.

~$466m

Precise positioning technology was estimated to have increased yields by up to $466 million in 2012.

Key Idea

Make our industries more productive and safer

Encourage innovation and new businesses

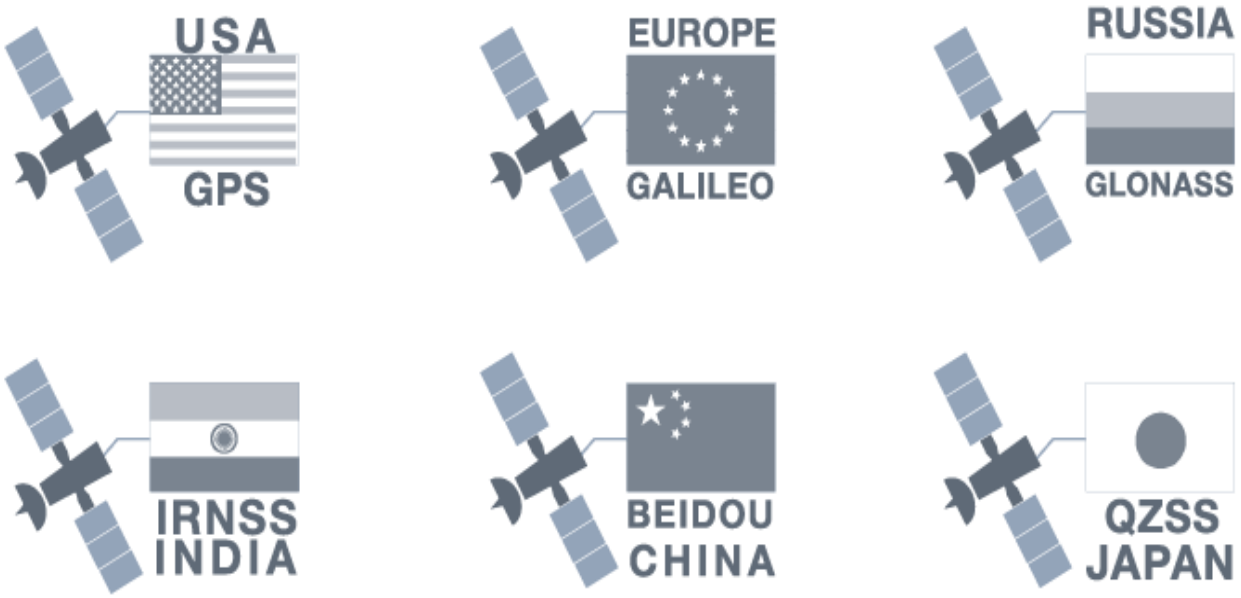
Challenges

MOBILE COVERAGE

AUSTRALIA'S NETWORK OF **GNSS GROUND STATIONS**

NATIONAL COVERAGE VIA SATELLITE

Opportunity



GLOBAL NAVIGATION SATELLITE SYSTEMS (**GNSS**)

Positioning – different users, different needs

Accuracy

- How close is my Position to the ‘truth’?

Integrity

- Can I trust my Position?

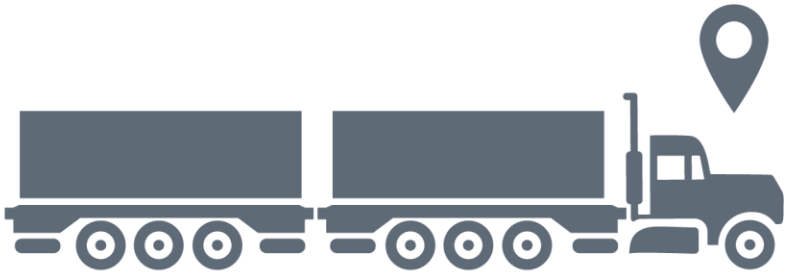
Accessibility

- Where can I receive corrections to improve my Position?
- Is it cost prohibitive? Is it supported by user equipment?

Resilience

- Can I rely that Position is available when I need it?
- How susceptible is it to spoofing and jamming?
- Should Australia have some sovereign control?

Where to next?



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