



NLA INTERNATIONAL

NAVISP Industry Days 18th January 2019  
MarRINav

Jonathan Turner



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## The operational rational

### Complex sea space

- Great volumes
- Bigger vessels
- Competing uses
- Autonomy...





# The economic rational

FINAL

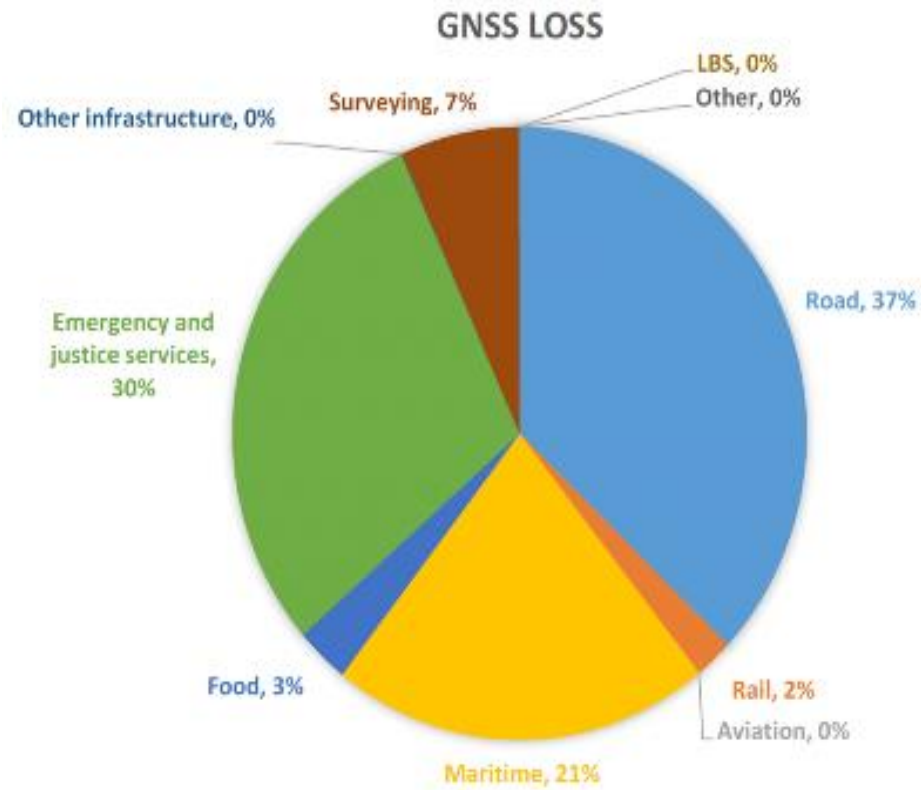
**Economic impact to the UK of a disruption to GNSS**

Showcase Report  
April 2017




**LE**  
London  
Economics

Commissioned by  
**Innovate UK**



### Satellite-derived Time and Position: A Study of Critical Dependencies



Government  
Office for Science



# The technical rational

- Vulnerabilities
- Augmentation





## Objectives and expected outcomes

Building Resilience & Integrity into UK CNI for  
Maritime Navigation, aids to navigation infrastructure  
and services at sea and in ports'



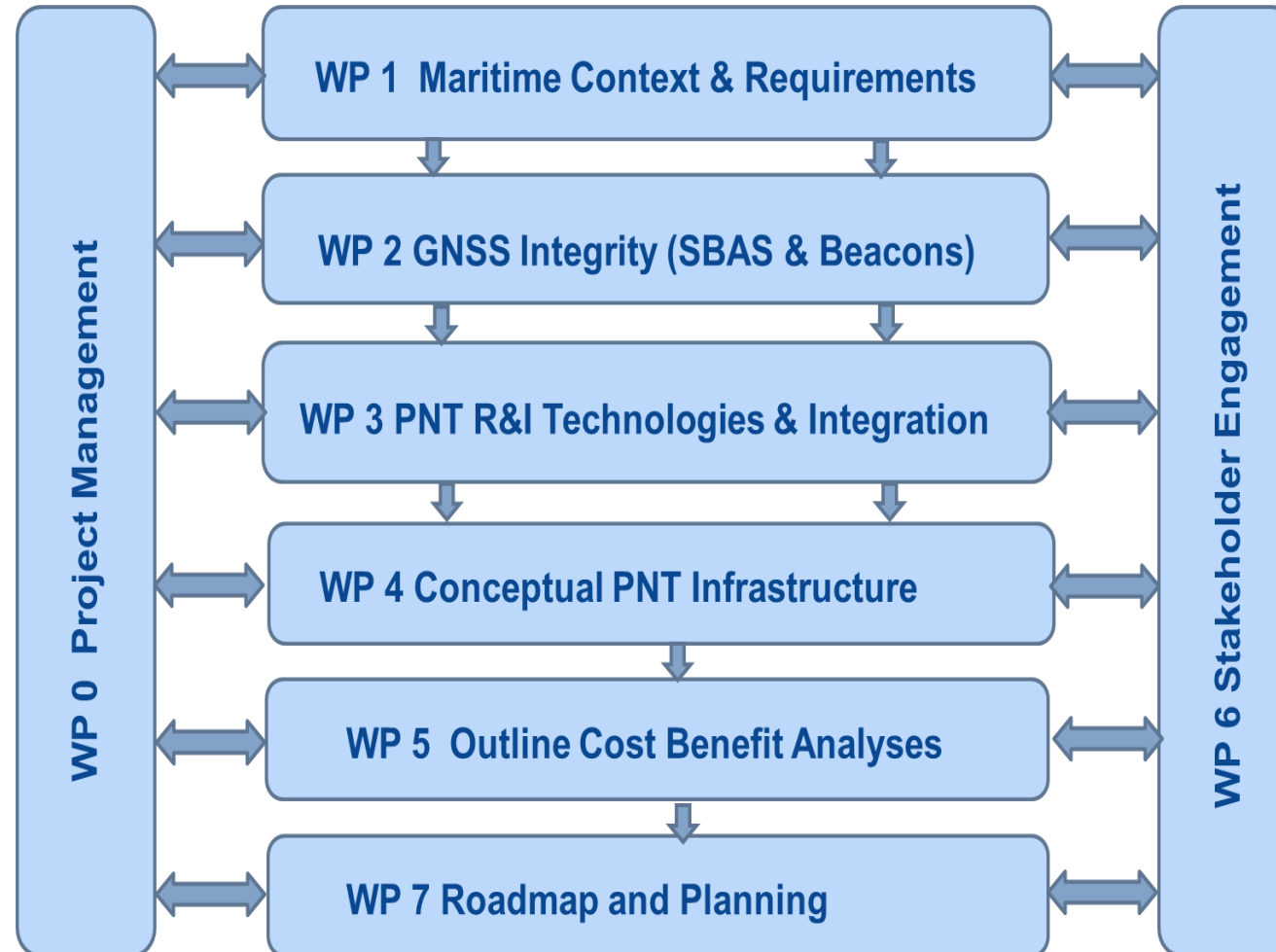
# The way forward - team

The image displays a grid of logos for various partners. At the top center is a teal star logo. Below it, the logos are arranged as follows:

- GRAD**: Logo with three wavy lines to the left of the text.
- NLA INTERNATIONAL**: Logo with a teal star above a horizontal line.
- University of Nottingham**: Logo with a blue square containing a white castle tower icon, with the text "University of Nottingham" and "UK | CHINA | MALAYSIA" below it.
- LE London Economics**: Logo with a map of Europe to the left of the text "LE London Economics".
- TERRAFIX**: Logo with a circular icon containing a crosshair and an arrow pointing to the top right.
- TAYLOR | AIREY**: Logo with the text "TAYLOR | AIREY" above a blue wavy line.
- UCLC**: Logo with the text "UCLC" in a bold font, "Consultants" in a smaller font below it, and a green and blue circular graphic to the left.
- BMT**: Logo with a blue and white globe icon to the left of the text "BMT".
- Innovate UK**: Logo with the text "Innovate UK" in a purple font and "Knowledge Transfer Network" in a black font below it.



## The way forward - approach





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[jonathan.turner@nlaltd.co.uk](mailto:jonathan.turner@nlaltd.co.uk)