

*The Big Debate*  
The Future of Operations Research



# Debate Context

- ISMOR brings together a diverse array of backgrounds and experience
  - There is wisdom in this crowd
- We tend to be opinionated folk, and don't mind sharing
- 4 teams; 4 perspectives on the future of OR
- This evening, informal team working
- Tomorrow, each team speaks for 5 mins on their vision and what actions we take to encourage/avoid it

# Utopia or Dystopia?

- We live in a time of rapid social, political and technological change
  - ...Social media. Distributed ledger technology. Robots. Artificial intelligence. Fake news. Unconventional politics. Migrant crises. Climate change. Resource shortages. Fractured alliances. New threats. Old threats. Economic crises. Aging populations...*
- Military operations research (OR) is also changing
  - ...Data analytics. Advanced modelling & simulation. Artificial intelligence. Changing/expanding military tasks/contingencies. Analyst recruitment & retention. Budget challenges...*
- We need to think about what all of this means for our profession

# Utopia or Dystopia?

- We want to consider the future of military OR from different angles:
  - Two teams will consider a **utopian** future – where data, analysis and reason are at the heart of defence decision making, and our services are in great demand
  - Two teams will consider a **dystopian** future – where truth is subjective, decision making is inconsistent, and where our services are not valued

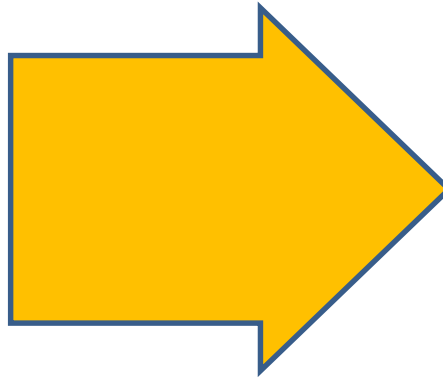
# Backcasting

3. What actions should we take now?



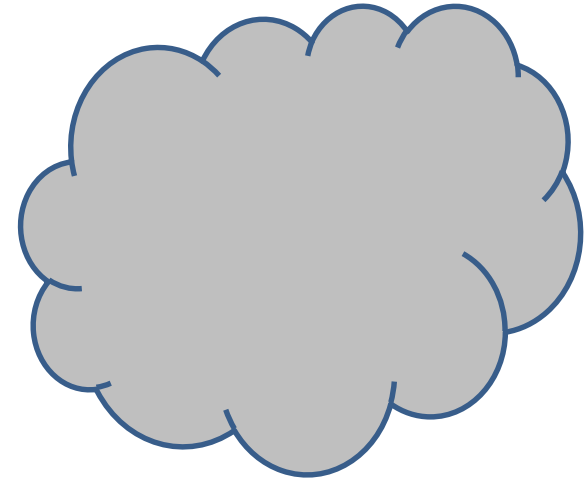
Consider how we might either maximise (utopia) or minimise (dystopia) the likelihood of each future. *How do we position ourselves to be able to spot the signs (of threat or opportunity) and be able to react? What should we be thinking about/doing now?*

2. How did we get there?



Consider the path by which that future state was approached. *What were the warning signs? What were the choices?*

1. The Future State



Consider the characteristics of the chosen future state. *What does it mean for military OR – in terms of the questions we are asked, the approaches that we take, the impact that we have, the health of our organisations,...?*

# (Very Brief!) Theme Lead comments

- Making Every Penny Count
- Modelling & Simulation
- Wargaming

# Questions?



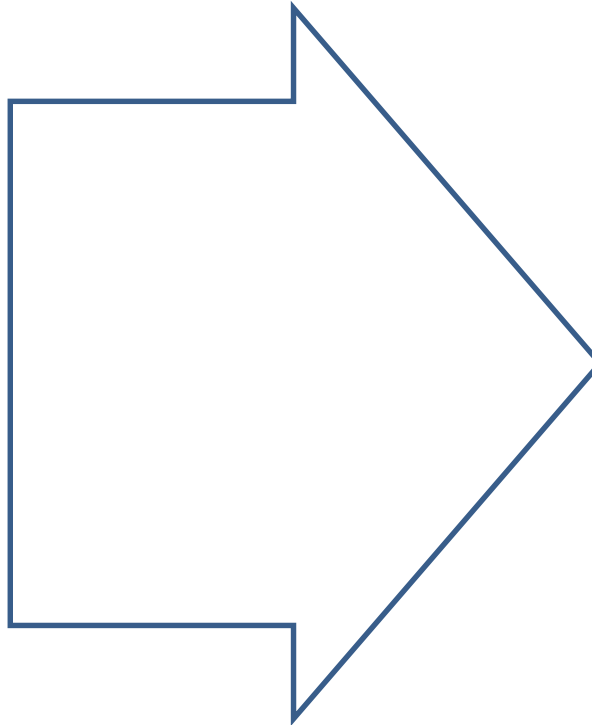
Team:

## 3. What actions should we take now?

Consider how we might either maximise (utopia) or minimise (dystopia) the likelihood of each future. *How do we position ourselves to be able to spot the signs (of threat or opportunity) and be able to react? What should we be thinking about/doing now?*

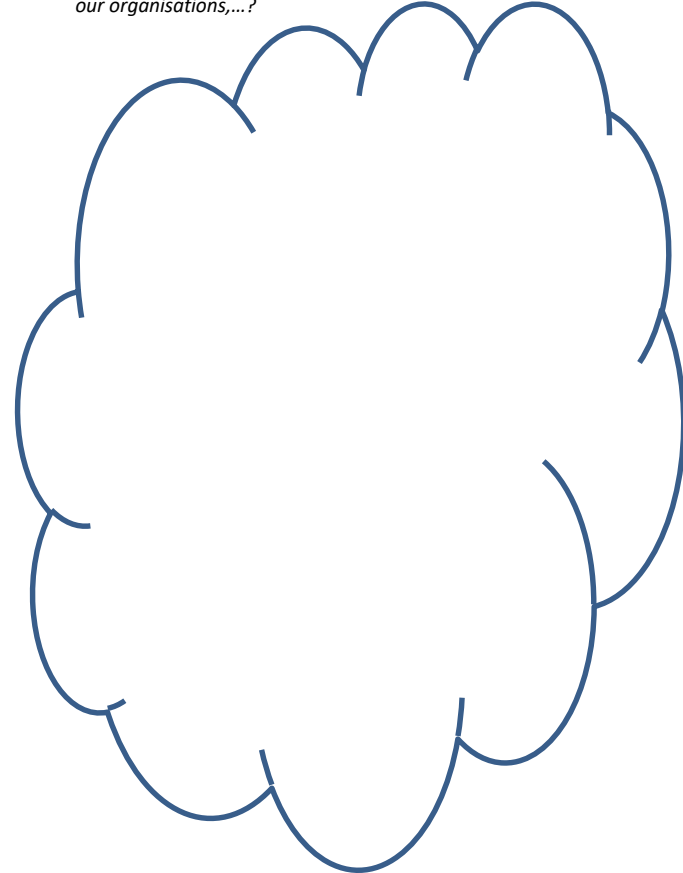
## 2. How did we get there?

Consider the path by which that future state was approached. *What were the warning signs? What were the choices?*



## 1. Future State

Consider the characteristics of the chosen future state. *What does it mean for military OR – in terms of the questions we are asked, the approaches that we take, the impact that we have, the health of our organisations,...?*



Any other thoughts?