

***Scenario-Based Planning (SBP) brief to the
Federal Foresight Community of Interest
(FFCoI)***

***Defense Threat Reduction Agency
Global Futures Office
Ms. Robin Champ***

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Perils of Forecasting

- Forecasting is about making predictions of the future based on past and present data and by analysis of trends
- The past isn't always a good predictor of the future
- The consequences of getting it wrong can be catastrophic
- The farther out in time, the less accurate the prediction

Alternatively,

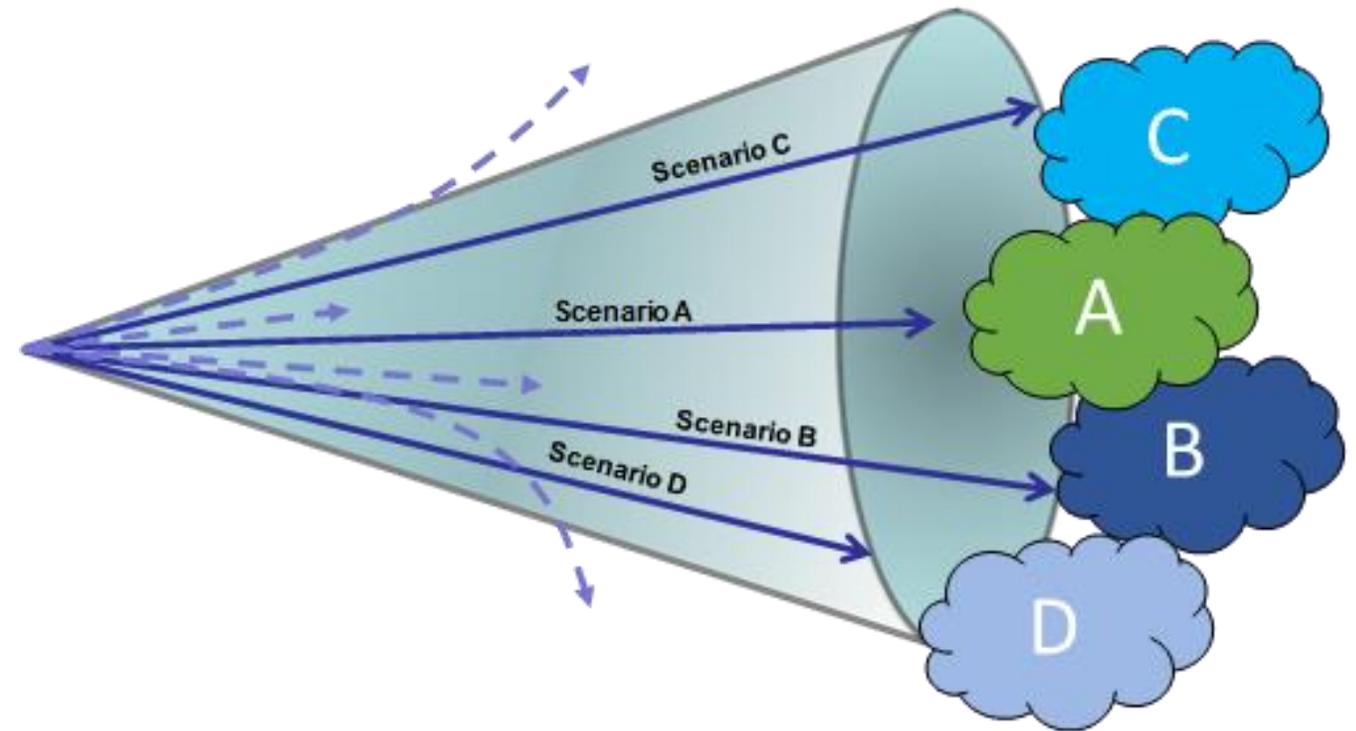
- Think about the future as a range of possible futures
- Embrace uncertainty
- Understand the possible landscapes of the multiple futures
- Prepare for, rather than predict, the future



Scenario-Based Planning (SBP)

Identify capabilities through an examination of plausible future operating environments

- Analytical horizon is typically a 20-year view
- Objective is to identify and prepare for potential sources of – and consequently, to avoid – catastrophic strategic and technological surprise
- Consider challenges and opportunities





SBP History

- 1950s-1960s - Herman Kahn's used scenarios to "think about the unthinkable," i.e., how to wage and win a nuclear war
- 1970s - Pierre Wack at Royal Dutch Shell pioneered SBP in business
- 1991 - Peter Schwartz wrote the definitive book about SBP: *The Art of the Long View*
- 2003-Present - US Coast Guard Project Evergreen uses SBP to develop strategic plan and inform decision-making
- 2006 - USG interagency Project Horizon used SBP to develop strategic interagency global affairs capabilities



SBP Clarified

What it isn't -

- *Being 'right' about the future*
- *'Most likely' or best case scenarios*
- *Forecasting the future*
- *Predictive analysis*
- *Threat 'projections'*
- ***Intended to replace traditional strategic planning***

What it is -

- *A serious consideration of alternate worlds*
- *Designed to challenge conventional wisdom*
- *An opportunity to imagine perspectives*
- *Purposely intended to push the boundaries*
- *'Out of the box' thinking*
- ***A way to confront uncertainty by embracing it and identifying potential needed capabilities***



Why use Scenarios?

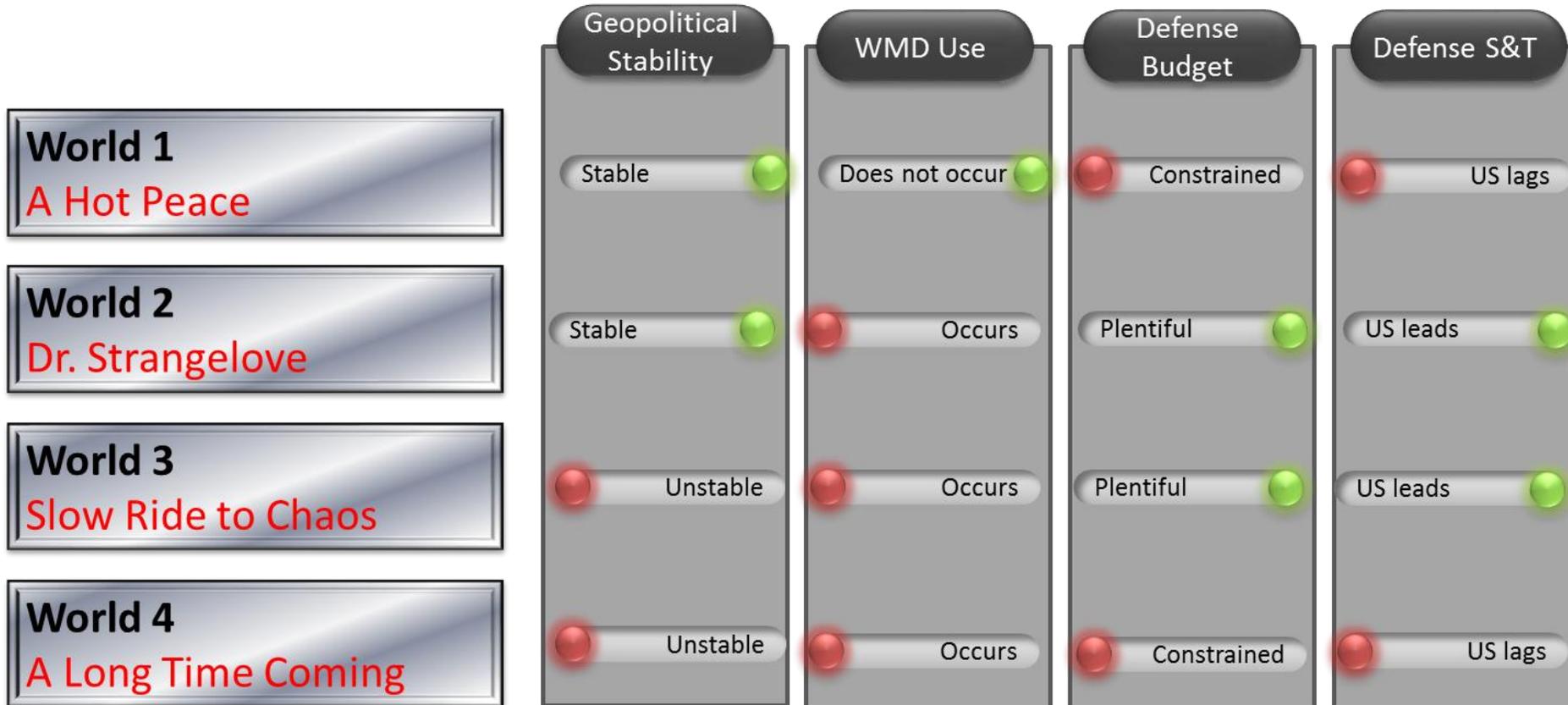
- The future holds an extraordinary range of possibilities
- No single view of the future can contain or consider them all
 - (and many of them are directly contradictory...)*
- Scenarios add the powerful element of a 'story'
 - Promote evocation, imagination, and innovation
 - Provide a coherency and logic that interweaves issues
 - Engage and inspire people more powerfully than a list of issues
- Scenarios are not intended to be all-inclusive or exhaustive

Scenarios enable a flexible, adaptable approach to uncertainty and change

include elements from across different scenarios



World Drivers and Poles





Scenario Vignettes

World 1 – Hot Peace

- Era of relative stability, prosperity, and tech ‘miracles’ following uncontrolled proliferation
- Global Surveillance State is a reality
- Post-NPT international agreements and space-based detection enable stability, despite proliferation
- Competition below armed conflict threshold

World 3 – Slow Ride to Chaos

- PRC/U.S. event in Taiwan Straits
- Next-gen VEOs continue to cause instability
- China’s rise to near-peer status with U.S. threatens global stability
- U.S. competes with China through indispensable tech (global power grid, etc.)
- Unattributed global bio and cyber attacks
- Cyber attack destroys German chemical plant – mass casualties/ecological damage

World 2 – Dr. Strangelove

- Relative geopolitical stability and prosperity
- Significant nuclear proliferation: Pacific Rim and Middle East
- Transnational terrorism constrained
- Non-attributed nuclear event on Yemeni Houthis results in retaliatory attack on Saudi troops
- Saudi Arabia, Iran, Pakistan, and possibly others postured for nuclear war

Scenario 4 – A Long Time Coming

- Another Middle East war brings the opioid crisis to a breaking point, but a solution emerges from an unlikely biological source
- United States and other allied nations face a systemic WMD risk never-before seen
- The world is unstable and the United States lags in defense spending and S+ T advancement



WMD in Scenarios

World 1 – Hot Peace

- Collapse of NPT
- 25 declared nuclear powers
- Mutual assured destruction seems to hold between and among nuclear powers
- No WMD use

World 3 – Slow Ride to Chaos

- Outbreak of flu-like symptoms at Chinese Embassy in Mexico, causing deaths within 72 hours, despite medical treatment
- Outbreaks begin to appear in China, India, and Moscow
- A cyber attack destroys critical components of federated, global power grid
- Failure of power controls at chemical plant in Germany causes deadly industrial chemical incident

- **Participants identify needed CWMD capabilities**
 - **Not specific programs, technologies, or systems**
- **Determine capability gaps**
- **Prioritize capabilities and determine actions required to achieve capabilities**

World 2 – Dr. Strangelove

- North Korea, Iran, and Saudi Arabia become nuclear powers
- Non-attributed nuclear explosion in Port of Hodeida
- Iran declares explosion an act of war by Saudi Arabia
- Retaliatory nuclear attack on Saudi troops in Sadah, later identified by U.S. as launched from Iran

Scenario 4 – A Long Time Coming

- Middle East conflicts result in returning U.S. soldiers having to deal with pain management via opioids
- Pharma company modifies rabies vaccine to make it fight pain and alleviates opioid addiction crisis
- Soldiers and people get sick and start dying
- Modified rabies vaccine contains Trojan Horse: a virus that can be turned on to kill with the right biological signal



SBP Breakout Sessions

- Session 1: Sources of Competition and Conflict
- Session 2: U.S. National Security Concerns
- Session 3: DoD Structure/Posture
- Session 4: Future Agency Capabilities
- Session 5: Future Capability Gaps
- Session 6: Prioritized Capabilities/Actions Required
- Session 7: How DTRA Should Be Postured
- Session 8: Build World Briefs
- Session 9: Present World Briefs (*at Plenary Session*)



SBP Analysis: Common Capabilities

Identified Capabilities	World 1	World 2	World 3	World 4
In Four Worlds				
Capability 1	●	●	●	●
Capability 2	●	●	●	●
Capability 3	●	●	●	●
Capability 4	●	●	●	●
Capability 5	●	●	●	●
Capability 6	●	●	●	●
In Three Worlds				
Capability 7		●	●	●
Capability 8	●	●	●	
Capability 9	●	●	●	
Capability 10	●	●	●	
Capability 11	●	●	●	
In Two Worlds				
Capability 12	●		●	
Capability 13	●		●	
Capability 14			●	●
Capability 15			●	●
In One World				
Capability 16	●			
Capability 17				●
Capability 18			●	
Capability 19			●	
Capability 20			●	



SBP and Strategic Planning

