# Strategic Planning for Defense and Security: An Info-Gap Approach

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## **Abstract**

There is a moral imperative to do one's best when making high-consequence decisions for defense and security. However, our understanding is often wrong and we are frequently surprised. Using our faulty understanding in trying to optimize policy outcomes is infeasible, even irresponsible. The practical implication of deep uncertainty is that we must ask: What outcomes are required? What performance is essential? How can we maximize our robustness against surprise? Under deep uncertainty, don't try to optimize the outcome. Rather, make the outcome good enough, and maximize the robustness against uncertainty. We describe the methodology of info-gap decision theory, and consider three examples: (1) decision to invade Iraq in 2002, (2) employing quantitative methods for force development, (3) scientific or evolutionary allocation strategies.

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## **General introduction to info-gap theory**

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- Michael Smithson and Yakov Ben-Haim, 2015, Reasoned Decision Making Without Math? Adaptability and Robustness in Response to Surprise, *Risk Analysis*, vol.35, #10, pp.1911-1918.

## Books on info-gap theory and application

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- Yakov Ben-Haim, 2010, Info-Gap Economics: An Operational Introduction, Palgrave-Macmillan.
- Yakov Ben-Haim, 2018, Dilemmas of Wonderland: Decisions in the Age of Innovation, Oxford University Press.

More sources: info-gap.com