On the Impact of Scientists and Engineers on Global Nuclear Security

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Our view of Global Nuclear Security looks across time...
...and the degree of cooperation and transparency...
...to create a space for exploring scenarios and solutions.
Within that space, our approach is focused on having impact, utilizing technical expertise at Sandia...
... resulting in a range of systems and solutions.
But the future remains dynamic and our planning focuses on a number of factors …

<table>
<thead>
<tr>
<th>Domestic</th>
<th>Global</th>
<th>Technical</th>
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</thead>
<tbody>
<tr>
<td>Changes in Administration and Congressional Priorities</td>
<td>Strength / weakness of international Institutions</td>
<td>Emerging threat capabilities (e.g., cyber, UAS)</td>
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<tr>
<td>Degree of private sector participation / buy-in&quot;</td>
<td>Global and regional stability</td>
<td>Tech surprise (e.g., advanced manufacturing)</td>
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<td>Ability to integrate across USG agencies with similar missions</td>
<td>Cooperation between states</td>
<td>Open source information</td>
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<td>Proliferation, terrorism, accidents</td>
<td>Long-term sustainability</td>
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... So we must remain flexible and strengthen our capabilities and partnerships to be able to respond …
... which requires science and technology to ...

- improve the Physical Security of our materials, facilities, transportation systems, and border crossings
- integrate Cyber Security into our security system architectures
- improve safeguards to Detect Diversion
- improve Data Analytics to improve situational awareness and anticipate future events
- support Cooperative Threat/Risk Reduction Activities and Confidence Building Measures
- improve our National Technical Means
Thank you