

NANO Risk Framework



e

ENVIRONMENTAL DEFENSE

finding the ways that work



The miracles of science™

Comprehensive, Flexible and Practical



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Comprehensive

Lifecycle Approach

Base Sets (Properties, Hazards, Exposure)

Cross-Functional Review

Review and Adapt

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Flexible

Appropriate to Stage of Development

Data Generation

Conservative Assumptions

Appropriate Bridging

Expert Judgment

Comprehensive, Flexible and Practical

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Lifecycle Approach
Base Sets (Properties, Hazards, Exposure)
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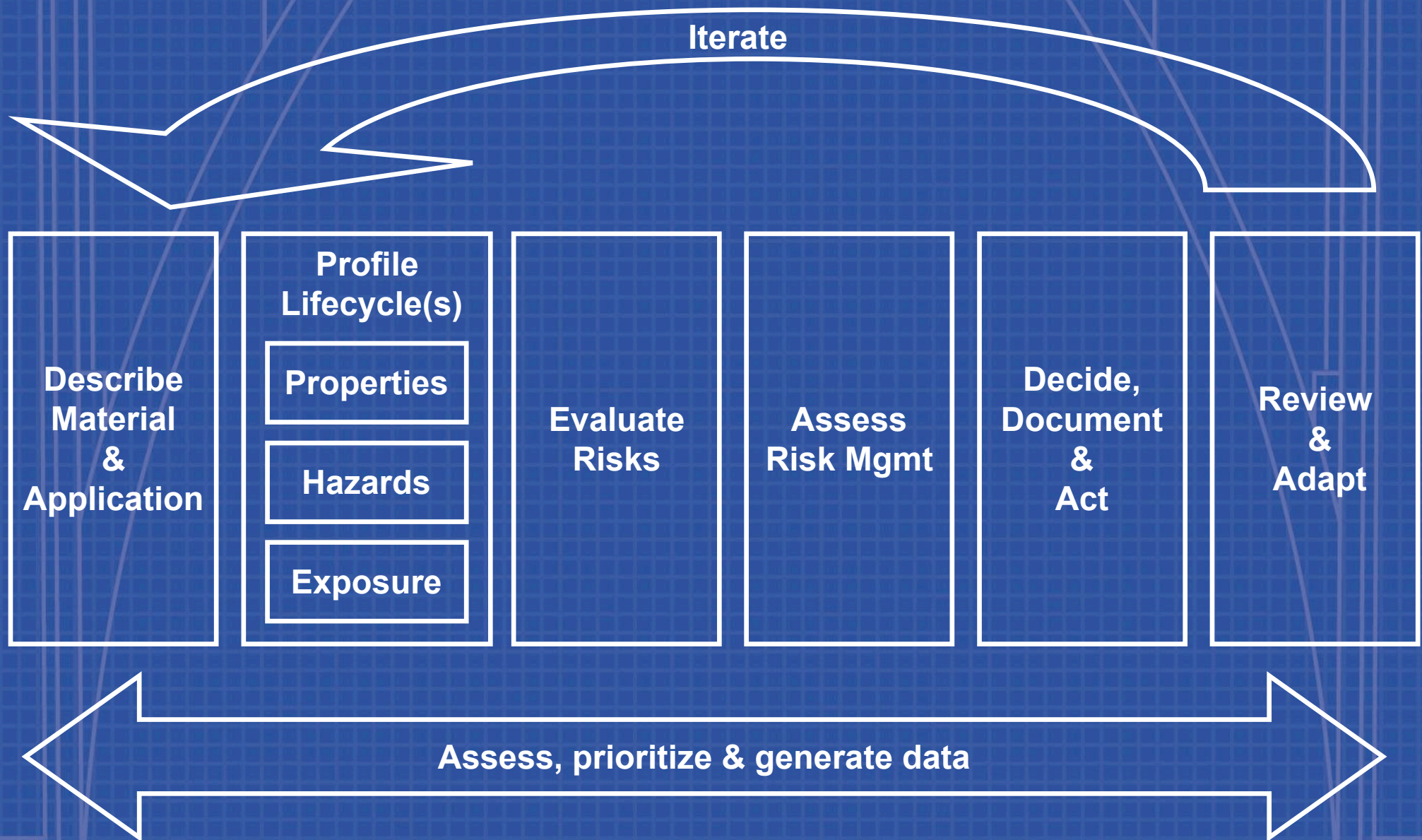
Flexible

Appropriate to Stage of Development
Data Generation
Conservative Assumptions
Appropriate Bridging
Expert Judgment

Practical

Familiar risk assessment paradigm
Typical development process
Complements product stewardship

Nano Risk Framework



OUTPUT WORKSHEET

An editable version of this Output Worksheet is available at www.NanoRiskFramework.com

Nanomaterial Risk Assessment Document — [nanomaterial]

Section 1: Describe Material and Its Applications

Develop basic descriptions — general overviews — of the nanoscale material and its intended uses.

General Overview:¹¹

Material Description:

Material source or producer:

Manufacturing process:

Appearance:

Chemical composition:

Physical form/shape:

Concentration:

Size distribution:

Solubility:

State of aggregation or agglomeration:

Material CAS number (if applicable):

Material	CAS Number	Composition

Main applications (current or expected):

Stage of development:

General physical and mechanical properties of this material:

Past experience with this material or a similar material:

Potential benefits/positives of the material:

Potential risks/negatives of the material:

Health:

Environmental:

Sources of additional information:

¹¹ The general overview should contain descriptions sufficient to guide development of more detailed profiles of the material's properties related to hazard and exposure potential at various lifecycle stages (such as manufacture, use, and end-of-life). This overview should be developed from information in the possession of the user or available in the literature.

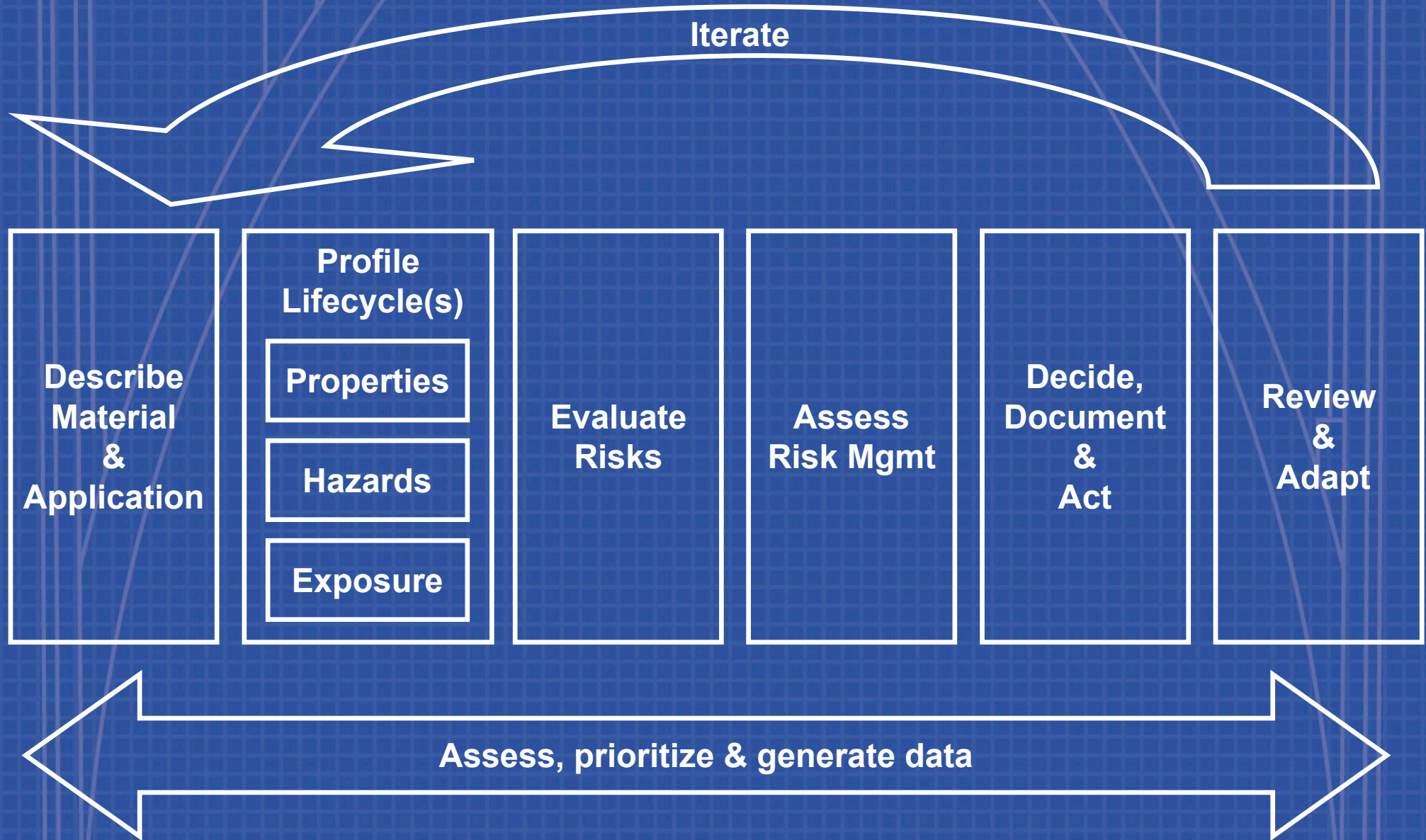
Output Worksheet

- Organize
- Record
- Share

Case Studies

Material	TiO2	CNTs	ZVI
Application	Light Stabilizer	Polymer Additive	Waste Remediation
Role	Producer	User	Customer
Stage	Commercial	R&D	Concept
Result	Proceed	Limit	Hold
Cost	125 hours \$170 K	80 hours \$5 K	40 hours \$0

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