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# Process for Assessing and Resolving Issues Related to Disruptive Technology

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*On this page:* Find the following processes for assessing and resolving issues related to Disruptive Technology.

## Review of the Project Fundamentals

### 1. Technological Obsolescence

- Have technological standards changed for construction or operation?
- Does the integration of disruptive technology require high upfront costs?
- Have business models in the sector changed due to disruptive technology?
- Has the demand for the service changed due to disruptive technology?
- Are these likely long term or short term changes?
- Have new laws or regulations related to technological standards been put into place?

### 2. Cyber Attacks

- Has the risk for cyber risk increased?
- Have new laws and regulations related to cyber-attacks been put into place?
- Is the project affected by cyber attacks?

### **3. Data Theft**

- Has data fraud or theft become a problem?
- Have new laws and regulations related to data privacy been put in place?

### **4. Economic and Social Disruption**

- Have disruptive technologies led to economic and social disruption and does this impact the project directly or indirectly?

### **Does the impact lead to financial distress for the project?**

- Loss of revenue?
- Increased costs for construction and/or operation?
- Inability of one or both parties to meet obligations?
- Risk of obsolescence or of the asset becoming stranded?

### **What contractual provisions are available to deal with these issues?**

#### **1. Are there contractual obligations/rights that allow the government to make or request the required adjustments?**

- Output-specifications/obligation to operate in accordance with good industry practice?
- Direct contractual obligation to adopt and/or integrate new technologies?
- Indexing and benchmarking

#### **2. Can the issue be dealt with by changing the term of the contract?**

#### **3. Are contractual provisions applicable that permit regular adjustments?**

- Variations
- Tariffs/payment rules or formulas

#### **4. Are legal mechanisms applicable to the PPP contract that permit adjustments in exceptional situations?**

- Equity principles/restoration of the economic equilibrium
- Force majeure
- MAGA/change in law
- Other compensation and relief events
- Is mandatory insurance covering the risk that has materialized?

#### **5. Can the PPP contract be renegotiated under the contract's renegotiation scheme to deal with the issues?**

#### **6. Can the issue be solved through relation management and/or dispute resolution?**

#### **7. Are emergency clauses/government step-in rights applicable?**

#### **8. Is early termination the only way to deal with the issues caused by disruptive technology?**

### **What are potential legal consequences for the government?**

- Direct obligations and rights under the PPP contract

- Direct obligations and rights under applicable law
- Potential claims under law and contract

#### Related Content

- [PPP Contracts in An Age of Disruption \(Download PDF version\)](#)

*The Disruption and PPPs section is based on the Report "[PPP Contracts in An Age of Disruption](#)" and will be reviewed at regular intervals.*

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