A-CDM Cost-Benefit Analysis Template

This template provides a simplified structure for conducting a cost-benefit analysis for A-CDM implementation, particularly suited to airports in the AFI region.

1. Key Assumptions

Parameter	**Value**
Annual passenger throughput	[Insert number per million]
Average aircraft movements/year	[Insert Number]
Fuel cost per liter	[Insert Value in USD]
Average delay encountered per flight	[Insert Minutes]
Number of stakeholders	[Insert Number]
Cost of extended turnaround time	[Insert value in USD]
Existing systems for information sharing with Stakeholders	[Available/Partial/Not Available]

2. Cost Estimate

Item	**Year 1 (USD)**	**Year 2 (USD)**	**Year 3 (USD)**	**Notes**
Software and IT Infrastructure				A-CDM platform setup & integration
Training and Capacity Building				Workshops, stakeholder sessions
Stakeholder Coordination Mechanism				Coordination body, governance
Data Integration and Security Systems				Cybersecurity, real-time dashboards
Maintenance and Support				Technical & operational support
Total Costs				

Chapter 3 -Initiation phase
Attachment 3.6

3. Benefits Estimate

Benefit	Annual Value (USD)	Notes
Fuel savings from reduced taxi times		Based on delay reduction and fuel burn rate
Reduced CO2 emissions (valued)		Monetized using carbon price
Improved on-time performance		Quantified as cost savings for airlines
Operational efficiency gains		Staff time, turnaround time improvements
Capacity to handle more flights		Based on improved resource use
Total Benefits		

4. ROI and Payback Period

Net Present Value (NPV)	[Insert Calculation]
Internal Rate of Return (IRR)	[Insert Calculation]
Payback Period	[Insert Years]

5. Sensitivity Analysis

Scenario	Assumption Change	Impact on ROI
Fuel price increases	+10%	[Insert % change]
Delays reduced more than expected	+2 mins/flight	[Insert % change]
Stakeholder participation limited	50% engagement	[Insert % change]

This template can be used to build a dynamic Excel-based model for airport management and regulators to make data-driven decisions on A-CDM investments.