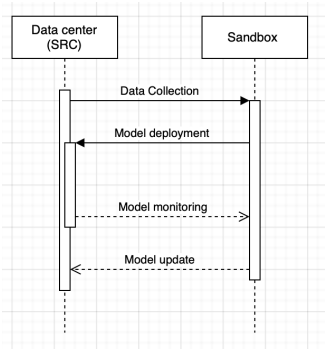
For reference, please consider these sample submissions. These are samples only. The contents here are not to be used for submission.

Use case-sample-1: This is an example of a granular, technical use case. This use case describes an energy saving scenarios for data centers, provides a detailed sequence diagram, mapped to ITU Recommendations (= standards). This use case is derived from an actual use case that has been submitted to a technical group at ITU (ITU Focus Group on Autonomous Networks).

Use case title	Intelligent Energy Saving for Data Centers
Contact person	*****, ai-calls@itu.int
Use case status	The use case is part of a larger research development
Use case Description	Background: The rapid growth of mobile Internet, cloud computing and other business drives the need of large-scale data centers. Data centers consume large amounts of energy to run and maintain their cooling system and facilities, servers and other devices. Traditional methods cannot efficiently reduce the energy costs of data centers. Therefore, AI mechanisms are introduced to analyze the monitoring data and adjust the configurations automatically. Intelligent energy saving solution include a series of autonomous behaviour, such as automatic data acquisition, AI-based energy consumption modelling and inference, facilities parameters control policies decision, facilities adjustment actions implementation, energy saving result evaluation and control policies continuous optimization.
Data Source	Not available.
Related SDGs	SDG 11
Partners	None
Links	https://www.itu.int/en/ITU-T/focusgroups/an/Documents/Use-case-AN.pdf https://extranet.itu.int/sites/itu-t/focusgroups/an/input/FGAN-I-008.docx
Future work	Data analysis, model training *If given scholarship and crowd credits, we would setup a data simulator which reflects the data generation from a data center. This would include CPU, disk, memory and network usage.* *This would then be analysed as a time series data.*

	Prediction on energy consumption and configurations on scaling would be demonstrated and published with the simulated data patterns.
Sequence Diagram	https://github.com/CrashingGuru/FGAN-Build-a-thon/blob/main/Docs/Sample%20Diagram.drawio.xml 

Use case-sample-2: This is an example of a high level use case. This use case describes a large project for SDG, there is no direct reference to ITU Recommendations. However, the connection to multi-modal data from different public sources is clearly mentioned.

Use case title	*AI for Climate Change Prediction and Adaptation*
Contact person	****, ai-calls@itu.int
Use case status	The use case is part of a larger project
Use case Description	AI and machine learning algorithms can be used to analyze vast amounts of climate data, including historical records, satellite imagery, and atmospheric measurements. By identifying patterns and relationships within the data, AI models can generate accurate climate models and make predictions about future climate conditions. These predictions can help inform policymakers, organizations, and individuals about potential long-term impacts and guide decision-making processes. This can in turn help in scenarios such as extreme Weather Event Prediction, identifying locations for resilience-building measures, such as infrastructure improvements, land-use planning, or diversification of economic activities. Policy measures such as aiding in the development of conservation plans, sustainable harvesting practices, and ecosystem restoration efforts can be derived too. AI can help engineers and planners incorporate climate resilience into their designs, ensuring infrastructure durability against future climate change impacts.
Data Source	Not available.

Related SDGs	SDG 13
Partners	None
Links	None
Future work	Multi-modal data analysis, model training, policy triggers *If given scholarship and crowd credits, we would setup a data simulator which reflects the data generation from a variety of sources such as* climate data, including historical records, satellite imagery, and atmospheric measurements. *This would include spatial coverage from IoT networks, statistics from previous history archives, public utilities and alerts issued via telecom networks.* *This would then be analysed as a multi-model graph data.* *Prediction on policy triggers and impacts on resource allocation and readiness would be demonstrated and published with the simulated data patterns.*
Sequence Diagram	https://github.com/CrashingGuru/FGAN-Build-a-thon/blob/main/Docs/Sample3.drawio.xml