GAP in EDXL Specifications—Facility Availability

The following list of critical infrastructure facilities does not have a specification or standard within the EDXL suite. This is followed by the [archived DHS list](https://www.dhs.gov/science-and-technology/critical-infrastructure) of U.S. Critical Infrastructure Sectors for an example.

 Please Note that facility Type is not a critical infrastructure in itself, nor is the Value. We need to organize each of these under a Critical Infrastructure that is most appropriate. I think we need to have this information standardized for capability, capacity and availability similar to EDXL-HAVE:

* Facility type: Type of facility
	+ Facility type Hotel: Value for type of facility hotel
	+ Facility type Hospital: Value for type of facility Hospital
	+ Facility type Clinic: Value for type of facility Clinic
	+ Facility type Theater: Value for type of facility Theater
	+ Facility type Stadium: Value for type of facility Stadium
	+ Facility type Warehouse: Value for type of facility Warehouse
	+ Facility type Police Station: Value for type of facility Police Station
	+ Facility type Firefigher Station: Value for type of facility Firefigher Station
	+ Facility type Military quarters: Value for type of facility Military quarters
	+ Facility type Electric Power plant: Value for type of facility Electric Power plant
	+ Facility type Oil Refinery: Value for type of facility Oil Refinery
	+ Facility type Oil Store: Value for type of facility Oil Store
	+ Facility type Transmissions tower: Value for type of facility Transmissions tower
	+ Facility type Electricity transport line: Value for type of facility Electricity transport line
	+ Facility type Oil Pipeline: Value for type of facility Oil Pipeline
	+ Facility type Gas Pipeline: Value for type of facility Gas Pipeline
	+ Facility type Inland waterways: Value for type of facility Inland waterways
	+ Facility type Water processing plant: Value for type of facility Water processing plant
	+ Facility type Desalination plant: Value for type of facility Desalination plant
	+ Facility type Dam: Value for type of facility Dam
* Total Capacity: total capacity of the facility indicated in the units given by the field units
* Current availability will indicate the current number of available resources indicated in the units given by the field units
* Total Capacity Units the units that the capacity is expressed in
* Operational status of fhe capacity with the following values:
	+ Facility Operational Status Decommissioned: Value for operational status of capacities that indicate that the capacity was decommissioned and has not been maintained but it could potentially work again if proper staff and maintenance was provided
	+ Facility Operational Status Idle: Value for operational status of capacities that indicates that the capacity is ready to work but currently idle
	+ Facility Operational Status Working: Value for operational status of capacities that indicates that the capacity is currently under operation
* Can cause when working: List of threats that can be caused by the facility if is compromised when it is working. Values to be taken from EDXL-CAP list of types of emergencies
* Can cause when idle: List of threats that can be caused by the facility it is compromised. Values to be taken from EDXL-CAP list of types of emergencies
* Possible Threat causes: List of threats that can cause that the facility gets compromised and cause any of the threats stated in the “Can cause” lists

Invaluable assets: list of invaluable assets, such as historic artworks that are considered worth to be protected and inside the facility

Below is a sample of what I mean by gathering various lists of Critical Infrastructure and combining and contrasting them to come to a consensus for what facility belongs to which CI, in this case using the [archived DHS list](https://www.dhs.gov/science-and-technology/critical-infrastructure) of U.S. Critical Infrastructure Sectors:

[**Chemical Sector**](https://www.cisa.gov/chemical-sector)

The Department of Homeland Security is designated as the Sector Risk Management Agency for the Chemical Sector.

There is no Facility Type or Value in List Above

[**Commercial Facilities Sector**](https://www.cisa.gov/commercial-facilities-sector)

The Department of Homeland Security is designated as the Sector Risk Management Agency for the Commercial Facilities Sector, which includes a diverse range of sites that draw large crowds of people for shopping, business, entertainment, or lodging.

* + Facility type Hotel: Value for type of facility hotel
	+ Facility type Hospital: Value for type of facility Hospital
	+ Facility type Clinic: Value for type of facility Clinic
	+ Facility type Theater: Value for type of facility Theater
	+ Facility type Stadium: Value for type of facility Stadium

[**Communications Sector**](https://www.cisa.gov/communications-sector)

The Communications Sector is an integral component of the U.S. economy, underlying the operations of all businesses, public safety organizations, and government. The Department of Homeland Security is the Sector Risk Management Agency for the Communications Sector.

There is no Facility Type or Value in List Above

[**Critical Manufacturing Sector**](https://www.cisa.gov/critical-manufacturing-sector)

The Department of Homeland Security is designated as the Sector Risk Management Agency for the Critical Manufacturing Sector.

* + Facility type Warehouse: Value for type of facility Warehouse
	+ Facility type Transmissions tower: Value for type of facility Transmissions tower
	+ Facility type Electricity transport line: Value for type of facility Electricity transport line
	+ Facility type Oil Pipeline: Value for type of facility Oil Pipeline
	+ Facility type Gas Pipeline: Value for type of facility Gas Pipeline
	+ Facility type Inland waterways: Value for type of facility Inland waterways

[**Dams Sector**](https://www.cisa.gov/dams-sector)

The Department of Homeland Security is designated as the Sector Risk Management Agency for the Dams Sector. The Dams Sector comprises dam projects, navigation locks, levees, hurricane barriers, mine tailings impoundments, and other similar water retention and/or control facilities.

* + Facility type Inland waterways: Value for type of facility Inland waterways
	+ Facility type Water processing plant: Value for type of facility Water processing plant
	+ Facility type Desalination plant: Value for type of facility Desalination plant
	+ Facility type Dam: Value for type of facility Dam

[**Defense Industrial Base Sector**](https://www.cisa.gov/defense-industrial-base-sector)

The U.S. Department of Defense is the Sector Risk Management Agency for the Defense Industrial Base Sector. The Defense Industrial Base Sector enables research, development, design, production, delivery, and maintenance of military weapons systems, subsystems, and components or parts to meet U.S. military requirements.

* + Facility type Military quarters: Value for type of facility Military quarters

[**Emergency Services Sector**](https://www.cisa.gov/emergency-services-sector)

The Department of Homeland Security is designated as the Sector Risk Management Agency for the Emergency Services Sector. The sector provides a wide range of prevention, preparedness, response, and recovery services during both day-to-day operations and incident response.

* + Facility type Police Station: Value for type of facility Police Station
	+ Facility type Firefigher Station: Value for type of facility Firefigher Station
	+ Facility type Military quarters: Value for type of facility Military quarters
	+ Facility type Electric Power plant: Value for type of facility Electric Power plant
	+ Facility type Transmissions tower: Value for type of facility Transmissions tower
	+ Facility type Electricity transport line: Value for type of facility Electricity transport line

[**Energy Sector**](https://www.cisa.gov/energy-sector)

The U.S. energy infrastructure fuels the economy of the 21st century. The Department of Energy is the Sector Risk Management Agency for the Energy Sector.

* + Facility type Oil Refinery: Value for type of facility Oil Refinery
	+ Facility type Oil Store: Value for type of facility Oil Store
	+ Facility type Transmissions tower: Value for type of facility Transmissions tower
	+ Facility type Electricity transport line: Value for type of facility Electricity transport line
	+ Facility type Oil Pipeline: Value for type of facility Oil Pipeline
	+ Facility type Gas Pipeline: Value for type of facility Gas Pipeline

[**Financial Services Sector**](https://www.cisa.gov/financial-services-sector)

The Department of the Treasury is designated as the Sector Risk Management Agency for the Financial Services Sector.

There is no Facility Type or Value in List Above

[**Food and Agriculture Sector**](https://www.cisa.gov/food-and-agriculture-sector)

The Department of Agriculture and the Department of Health and Human Services are designated as the co-Sector-Risk Management Agencies for the Food and Agriculture Sector.

* + Facility type Warehouse: Value for type of facility Warehouse

[**Government Facilities Sector**](https://www.cisa.gov/government-facilities-sector)

The Department of Homeland Security and the General Services Administration are designated as the Co-Sector Risk Management Agencies for the Government Facilities Sector.

There is no Facility Type or Value in List Above

[**Healthcare and Public Health Sector**](https://www.cisa.gov/healthcare-and-public-health-sector)

The Department of Health and Human Services is designated as the Sector Risk Management Agency for the Healthcare and Public Health Sector.

* + Facility type Hospital: Value for type of facility Hospital
	+ Facility type Clinic: Value for type of facility Clinic

[**Information Technology Sector**](https://www.cisa.gov/information-technology-sector)

The Department of Homeland Security is designated as the Sector Risk Management Agency for the Information Technology Sector.

There is no Facility Type or Value in List Above

[**Nuclear Reactors, Materials, and Waste Sector**](https://www.cisa.gov/nuclear-reactors-materials-and-waste-sector)

The Department of Homeland Security is designated as the Sector Risk Management Agency for the Nuclear Reactors, Materials, and Waste Sector.

There is no Facility Type or Value in List Above

[**Transportation Systems Sector**](https://www.cisa.gov/transportation-systems-sector)

The Department of Homeland Security and the Department of Transportation are designated as the Co-Sector-Specific Agencies for the Transportation Systems Sector.

There is no Facility Type or Value in List Above

[**Water and Wastewater Systems Sector**](https://www.cisa.gov/water-and-wastewater-systems-sector)

The Environmental Protection Agency is designated as the Sector Risk Management Agency for the Water and Wastewater Systems Sector.

* + Facility type Inland waterways: Value for type of facility Inland waterways
	+ Facility type Water processing plant: Value for type of facility Water processing plant
	+ Facility type Desalination plant: Value for type of facility Desalination plant
	+ Facility type Dam: Value for type of facility Dam