Disaster Response Trade Study Tool

BEST ARCHITECTURE BASED ON SELECTIONS AND WEIGHTINGS:

|  |  |  |
| --- | --- | --- |
| Technology | Type | Description of Selected Technology |
|  | Platform |  |
|  | Communications |  |
|  | Sensor |  |

SELECTED DISASTER EFFECTS:

|  |  |  |
| --- | --- | --- |
| Disaster Effect | Selected | Description |
| Flood | 🗸 | Flood represents…. |
| Debris |  | Debris is characterized by… |
| Smoke/Dust/Ash (airborne) |  |  |
| Ground Instability | 🗸 | Ground Instability refers to …. |
| Land Slide |  |  |
| Mud Slide |  |  |
| Structural Damage | 🗸 |  |
| High Wind (near term) |  |  |
| Hazardous Material Spill |  |  |
| Radiological Spill |  |  |
| Lava |  |  |
| Ash |  |  |

ENVIRONMENT DEFINED AS:

|  |  |  |  |
| --- | --- | --- | --- |
| Terrain Effect | Value Range | Value Selected | Description of selected value |
| Elevation |  |  |  |
| Roads |  |  |  |
| Bridges |  |  |  |
| Foliage |  |  |  |
| Wetness |  |  |  |
| Streams |  |  |  |
| Beach |  |  |  |
| Water Ways |  |  |  |
| Urbanization |  |  |  |
| Range |  |  |  |
| Population |  |  |  |
| Persistence |  |  |  |
| Trafficability |  |  |  |

WEIGHTING CRITERIA DEFINED AS:

PLATFORMS:

|  |  |  |
| --- | --- | --- |
| Platform Attributes | Weighting | Description of Attribute |
| Range (km) |  |  |
| Ops Duration (Hours) |  |  |
| Cost Ranking |  |  |
| Payload (kg) |  |  |

COMMUNICATIONS:

|  |  |  |
| --- | --- | --- |
| Communications Attributes | Weighting | Description of Attribute |
| Range (km) |  |  |
| Data Rate (Mbps) |  |  |
| Cost Ranking |  |  |
| Weight (kg) |  |  |

SENSOR

|  |  |  |
| --- | --- | --- |
| Sensor Attributes | Weighting | Description of Attribute |
| Coverage Area (km) |  |  |
| Resolution (m) |  |  |
| Cost Ranking |  |  |
| Weight (kg) |  |  |