

## Activity 1

### Levels of Service & Risk Impacts

#### **Objective: To assess the Levels of Service and Risk Impacts to Services**

Defining technical levels of service are essential to understanding asset needs (including support needs such as trained staff and data). Cross functional participation (involving all stakeholders) ensures a broad range of suggestions and perspectives toward defining technical levels of service.

The exercise will:

- Build the connections between the services and the assets that provide and support them.
- Define the technical levels of service (TLOS) to mitigate the unacceptable risks.

#### **Steps:**

In groups of 5 to 6: Start with a general discussion about the service being provided and the asset you would like to use for the exercise.

#### **1. What is the Program (eg. Water) and Service (eg. Treatment, Distribution..) that your group would like to look at?**

- a. Enter these in Column 1 and 2 of the S2A

#### **2. What is the service expectation of the customer (Customer Level of Service)?**

- a. Is there an expectation that service is never interrupted or minimal interruption (what is the tolerance for asset failure and service disruption?).
- b. Normally non-technical and high level reflection of the service that the customer desires.
- c. Enter the Customer Level of Service in column 3 of the S2A

#### **3. Look at the Assets involved in delivering that service.**

- a. There can be many assets involved. Select the specific asset class (A group of like assets that provide the service) that your table would like to review.
- b. Enter the Asset Class you are going to review in column 4 of the S2A (examples are provided as suggestions).

#### **4. Columns 5, 8 and 9 will be completed in the next activity based on the following asset specific discussions.**

#### **5. Discuss common threats to the infrastructure and what measurable ways you have in place to control and reasonably mitigate those risks (Your technical levels of service).**

- a. There may be a tolerance/acceptance for some risk events if there is a management plan to deal with this failure (reactive action), e.g. an Earthquake.
- b. If a risk event is not acceptable for the service, what mitigation measures (TLOS) have to be in place to minimize the risk of this occurrence (proactive actions).
- c. Enter the Common threats in column 6 and the TLOS in column 7 of the S2A

#### **6. Look at the Assets involved in delivering that service and how they are at risk of failing – and what would happen to the service.**

**This will be used in the next activity to complete the service connection and review the risks to service of asset failure.**

Service to Asset (S2A) Diagrams								
Public Service View			Internal Service View					
Program	Service Name	Customer Level of Service	Associated Asset Class	Inherent Risk	Common Threats	Technical Level of Service (TLOS)	Residual Risk	Current Risk
			TEST	High 330			Low 132	Medium 165
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>

<sup>1</sup> Criticality Weighting Guide - TLOS (Appendix A)

- 1 Unimportant
- 2 Relatively Unimportant
- 3 Relatively Important
- 4 Important
- 5 Very Important

<sup>2</sup> Condition Rating Guide (Appendix B)

- A - Very Good
- B - Good
- C - Fair
- D - Poor
- F - Fail

Risk Level Thresholds

- 0-150 Low
- 151-250 Medium
- 251-350 High
- >350 Severe

Condition Related TLOS
Performance Related TLOS
Currently Unmeasured TLOS