

**Barrier Strength Value (BSV) to Barrier Quality Correlation**

**A) Six Elements of Barrier Quality\*:**

**1. Effectiveness:**

Extent to which the Barrier will mitigate (reduce likelihood/ severity) the Event or Consequence.

**2. Cost-Benefit:**

Extent to which the perceived benefits of the Barrier outweigh the costs.

**3. Practicality:**

Extent to which the Barrier can be implemented, in terms of technology, financial and administrative resources.

**4. Acceptability:**

Extent to which the Barrier is consistent with other stakeholders' paradigms or requirements.

**5. Enforceability:**

Extent to which the Barrier can be monitored or surveyed for compliance/ implementation.

**6. Durability:**

Extent to which the Barrier will be sustainable.

**B) Barrier Quality to BSV Correlation Procedure:**

i) Assess the Quality of each given Barrier as follows:

Barrier Quality Element	Quality Descriptor [High, Moderate, Low, Poor]	Quality Score [3 (H), 2 (M), 1 (L), 0 (P)]
1. Effectiveness	Low	1
2. Cost-benefit	High	3
3. Practicality	Moderate	2
4. Acceptability	Moderate	2
5. Enforceability	High	3
6. Durability	Moderate	2
Barrier Quality Total Score >>		13
BSV		4

E-PC1	E-PC2	E-PC3	E-PC4	N-PC1	N-PC2	N-PC3	N-PC4	E-RM1	E-RM2	E-RM3	N-RM1	N-RM2	N-RM3	N-RM4	N-RM5
2	2	2	3	3	3	2	2	1	2	3	3	3	2	2	2
3	3	3	2	3	3	2	3	1	1	3	1	2	2	3	3
3	2	3	2	3	3	2	2	1	3	3	2	3	2	2	2
2	2	3	2	3	3	2	2	1	3	3	3	2	2	2	2
0	0	1	1	3	3	2	0	0	2	3	1	1	1	0	1
1	1	2	2	3	2	1	3	1	2	2	2	3	1	3	3
11	10	14	12	18	17	11	12	5	13	17	12	14	10	12	13
3	3	4	4	5	4	3	3	2	4	5	4	4	3	4	4

ii) Match above Table 1 "Total Score" with Table 2 below to obtain the BSV for the given Barrier.

Barrier Quality Score Range	BSV
0 to 3	1
4 to 7	2
8 to 11	3
12 to 15	4
16 to 18	5

\*Note: The 6 elements in above Barrier Quality assessment is derived from Doc 9859 (3rd Ed), 5.3.59.