

WBS Element # \_\_\_\_\_ Element Name \_\_\_\_\_

**Design Risk** (check one of 4): (from RSVP at BNL, similar for US CMS, NCSX)

	Risk Factor	Weight
<input type="checkbox"/> Concept only	15%	1
<input type="checkbox"/> Conceptual Design Phase: some drawings; many sketches	8%	1
<input type="checkbox"/> Preliminary Design > 50 % complete; some analysis complete	4%	1
<input type="checkbox"/> Detailed Design > 50% Done	0%	1

**Design Risk = Risk Factor \* Weight = \_\_\_\_\_ %**

**Technical Risk** (check one of 8 and choose weight):

<input type="checkbox"/> New design; well beyond current state-of-the art	15%	2 or 4
<input type="checkbox"/> New design of new technology; advances state-of-the art	10%	2 or 4
<input type="checkbox"/> New design; requires some R&D but does not advance the state-of-the-art	8%	2 or 4
<input type="checkbox"/> New design; different from established designs or existing technology	6%	2 or 4
<input type="checkbox"/> New design; nothing exotic	4%	2 or 4
<input type="checkbox"/> Extensive modifications to an existing design	3%	2 or 4
<input type="checkbox"/> Minor modifications to an existing design	2%	2 or 4
<input type="checkbox"/> Existing design and off-the-shelf hardware	1%	2 or 4

**If there are both Design and Manufacturing concerns, use weight = 4, otherwise use weight = 2**

**Technical Risk = Risk Factor \* Weight = \_\_\_\_\_ %**

**Cost Risk** (check one of 8 and choose weight):

<input type="checkbox"/> Engineering judgment	15%	1 or 2
<input type="checkbox"/> Top-down estimate from analogous programs	10%	1 or 2
<input type="checkbox"/> In-house estimate for item with minimal experience and minimal in-house capability	8%	1 or 2
<input type="checkbox"/> In-house estimate for item with minimal experience but related to existing capabilities	6%	1 or 2
<input type="checkbox"/> In-house estimate based on previous similar experience	4%	1 or 2
<input type="checkbox"/> Vendor quote ( <b>or industrial study</b> ) with some design sketches	3%	1 or 2
<input type="checkbox"/> Vendor quote ( <b>or industrial study</b> ) with established drawings	2%	1 or 2
<input type="checkbox"/> Off-the-shelf or catalog item	1%	1 or 2

**If there are both Cost and Labor concerns, use weight = 2, otherwise use weight = 1**

**Cost Risk = Risk Factor \* Weight = \_\_\_\_\_ %**

**Schedule Risk** (check one):

<input type="checkbox"/> Delays completion of critical path subsystem item	8%	1
<input type="checkbox"/> Delays completion of non-critical path subsystem item	4%	1
<input type="checkbox"/> No schedule impact on any other item	2%	1

**Schedule Risk = Risk Factor \* Weight = \_\_\_\_\_ %**

Prepared by: \_\_\_\_\_ date: \_\_\_\_\_

Comments: \_\_\_\_\_ then sum:

**suggested Total Risk =  $\sum RF_i * W_i$  = \_\_\_\_\_ %**