

PC-10 Feasibility

Question:

Is it feasible to fund the matrix testing needed to develop the PC-10 Category as currently proposed with six new tests?

Assumptions

- 6 new PC-10 tests
- Average cost per test -- \$100,000
- Two labs in the matrix
- 5 stands -- 2 stands Lab A
3 stands Lab B
- 3 featured oils in the matrix
- Precision/BOI/VGRA necessary
- Tests needed – 28 to 40 tests per each new engine test

Calculations

- 6 new tests at \$100,000 per test. \$600,000 for one run in all new tests.
- \$600,000 x 28 tests per engine test type -- \$16,800,000 is the minimum total matrix cost – **Case A**
- \$600,000 x 40 tests per engine test type -- \$24,000,000 is the likely upper total matrix cost limit – **Case B**

Funding Splits

Case A – Total Matrix Cost \$16,800,000

Case B – Total Matrix Cost \$24,000,000

- 1) Each stakeholder (EMA, API, ACC) pays 1/3 of the total cost
Case A: \$5,600,000 for API and ACC each
Case B: \$8,000,000 for API and ACC each

- 2) EMA pays a fixed amount -- API and ACC split the balance
EMA: \$500,000
Case A: \$8,150,000 for API and ACC each
Case B: \$11,750,000 for API and ACC each

- 3) A scheme similar to PC-9
 - Labs donate tests for calibration, 3/2/2
 - EMA pays a fixed amount
 - API and ACC split the balance

<u>Case A</u>		<u>Case B</u>	
\$16,800,000	Total Cost	\$24,000,000	Total Cost
<u>7,200,000</u>	Labs	<u>7,200,000</u>	Labs
\$9,600,000	Funding	\$16,800,000	Funding
<u>\$500,000</u>	EMA	<u>\$500,000</u>	EMA
\$9,100,000		\$16,300,000	
\$4,550,000	API & ACC each	\$8,150,000	API & ACC each

- 4) Bare Bones – Precision only of 18 tests – Labs donate tests for calibration, EMA pays a fixed amount, and API and ACC split the balance

18 x \$600,000 = \$10,800,000	Total Cost
<u>7,200,000</u>	Labs
\$3,600,000	Funding
<u>500,000</u>	EMA
\$3,100,000	
\$1,550,000	API and ACC each