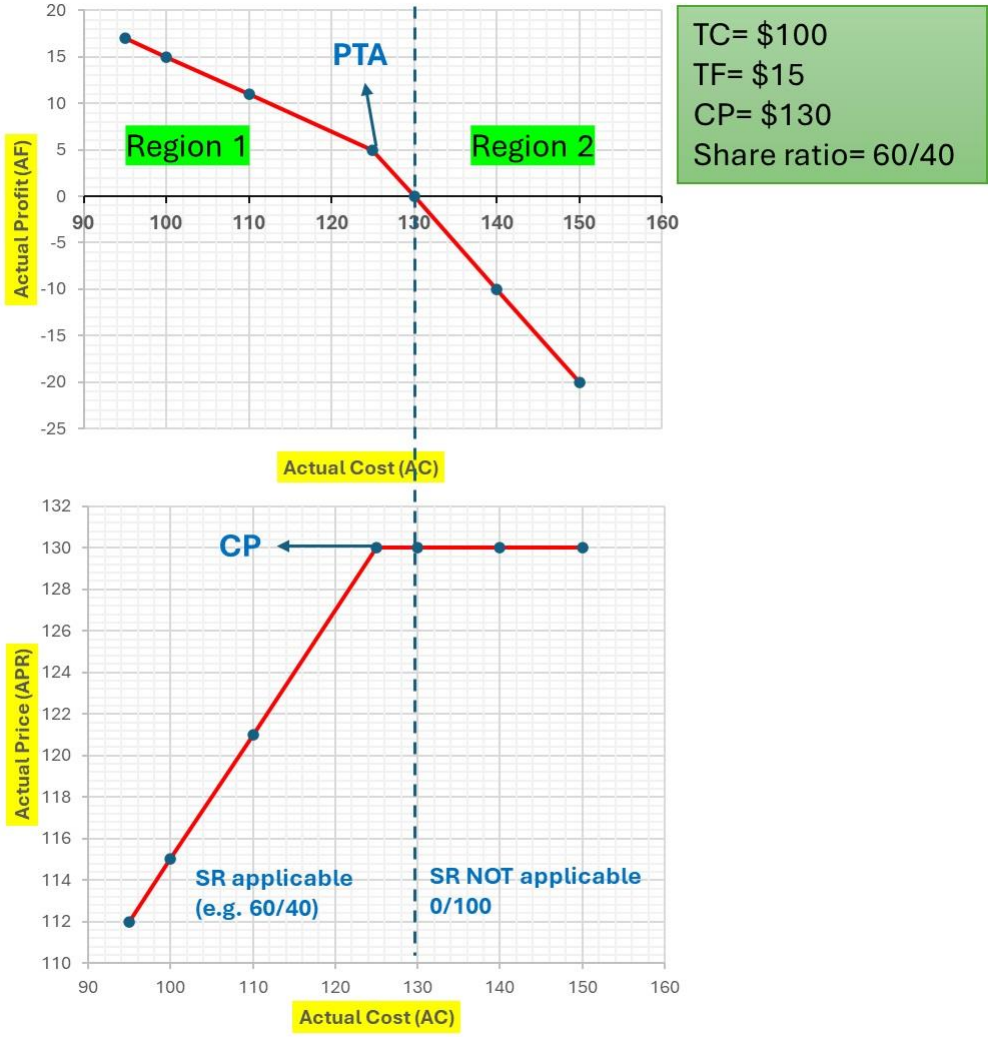
FPIF contract methodology

In FPIF type of contract, the customer agrees to share the saving/overrun with the contractor upon an agreement called Share Ratio (SR). But this agreement is only applicable up to a cost limit called Point of Assumption (PTA) cost. Having said that, the customer will not pay the contractor more than a price at PTA called Ceiling Price (CP). See the example diagram below:



We have two regions in the price vs. cost plot: **Region 1 (share ratio is applicable)** and **Region 2 (share ratio is NOT applicable 0/100)** , before and after PTA. Let's go through each region:

## Region 1: AC can be greater/less than TC AND AC<PTA →

**1- Seller's Share of saving/overrun= (TC-AC)* SSR**

In our current example:

a. If AC= $95 → AC<TC → Seller's share of saving= (100-95)*0.4= $2

b. If AC= $100 → AC=TC → Seller's share= 0

c. If AC= $110 → AC> TC → Seller's share of overrun= (100-110)*0.4= - $4

d. If AC= $125 → AC>TC **&** AC=PTA →

Seller's share of overrun= (TC-PTA)*0.4= (100-125)*0.4= - $10

**2- Actual Profit/ Fee (AF): AF= TF + (TC-AC)*SSR**

**OR AF= TF+ Seller's share of saving/overrun**

In our current example: (refer the seller's share calculated above)

a. AF= 15 + 2= $17
b. AF= 15+ 0= $15 = TF
c. AF= 15 + (-4) = $11
d. AF= 15 + (-10) = $5

**3- Actual Price (APR): APR= AC+ AF**

In our current example: (refer the AF calculated above)

a. APR= 95+17= $112
b. APR= 100+15= $115 (Target Price)

c. APR= 110+11= $121
d. APR= 125+5= $130 = CP

## Region 2: AC is greater than TC AND PTA →

1- **Seller's Share of overrun= (TC-PTA)* SSR+ (PTA-AC)**
The first part of the formula is according to the overrun in Region 1 where the share ratio is applicable (e.g. 60/40 here), and the second part is according to the overrun in Region 2 where the share ratio (agreement) is NOT applicable and it is 0/100.

In our current example:

e. If AC= $130 → AC>TC & AC>PTA →

Seller's share of overrun=

(TC-PTA) *0.4+ (PTA-AC) = (100-125) *0.4 + (125-130) = -10-5 = - $15

2- **Actual Profit/ Fee (AF):** **AF= TF+ Seller's share of overrun (calculated above)**

In our current example:

e. AF= 15 + (-15) = $0 (NO Profit!)

3- **Actual Price (APR): APR= AC+ AF = CP**

In our current example:

e. APR=CP= $130