EXAMPLE OF CALCULATING CONVERSION FACTORS FROM COUNTRY A TO COUNTRY B APPLYING GODDARD'S METHOD

(Coddard, 1985)

Proof in Country A	Proof in Country B	Reliability in Country B	'Degressed' proof in Country B
(p_A)	(p_B)	(R_B)	(p_B')
114	-11	.75	-10.4
127	0	.79	3.4
122	8	.92	9.8
135	19	.95	20.7
122	- 4	.55	3.1

Step 1: Calculate the 'deregressed' proof (p_B') by the formula

$$p_B' = \frac{p_B - g}{R_B} + g$$

where g = the group effect for the group to which each bull belongs.

In the example above it was assumed that all bulls belong to the same group with group effect = -12.7. The group effect is the proof (p_B) that a bull would receive if he had no information other than to which group he belonged. If the country B evaluation system doesn't include groups then g is simply the proof that would be given to a bull with no information.

Step B: Calculate the regression of p_B' on p_A

i.e. $p_B' = a + bpA$.

Then a and b are the a and b values of the conversion equation.

For the example above a = -159.3

b = 1.33