

Initiator
(sk_I, pk_I)

Responder
(sk_R, pk_R)

Negotiation

$\xrightarrow{\text{cky}_I|0, m_1 = (\overrightarrow{SA})}$
 $\xleftarrow{\text{cky}_I|\text{cky}_R, m_2 = (SA)}$

Key Agreement/Authentication

$\xrightarrow{\text{cky}_I|\text{cky}_R, m_3 = (g^x, n_I, aux_I)}$
 $\xleftarrow{\text{cky}_I|\text{cky}_R, m_4 = (g^y, n_R, aux_R)}$

Key Derivation

derive k, k_0, k_1, k_2

Encrypted Authentication and Key Confirmation

$\xrightarrow{\text{cky}_I|\text{cky}_R, c_5}$
 $\xleftarrow{\text{cky}_I|\text{cky}_R, c_6}$