A trace has been found.

Honest Process (derive_hashed_sn(serial_number_const),(a_7,pre_app1))

___(a_8,open_ch)

 $(serial_number_const, \\ (derive_encryption_key(exp(exp(g,pri_c),kdf1(serial_number_const)), \\ a_7),pre_app1))$ $\sim X_3 = (AES_enc(\sim M_27,kdf2(\sim M_14,\sim M_17),\sim M_17),open_ch)$ (AES_enc(secure_param_4,kdf2(derive_encryption_key(exp(exp(g,pri_c),kdf1(serial_number_const)),a_7), n2_2),n2_2),open_ch)