Abbreviations

~X_1 = Request(Header(~M_19075,~M_19076,~M_19077,~M_19078, ~M_19079),~M_19068,CoAP_Option_OSCORE_Option_context(~M_19072,~M_19073,~M_19074),payload_from_ciphertext(~M_19071))

= Request(Header(CoAP_versionOne,CoAP_nonConfirm, CoAP_tokenLength(token_18529),CoAP_GETCode,messageID_18530), token_18529,CoAP_Option_OSCORE_Option_context(partial_iv_18531,IDir_18528,a_18521),payload_from_ciphertext(enc_COSE_ciphertext(derive_key_context(a_18520, IDir_18528,default_aead_algorithm,a_18521),aead_nonce(IDir_18528,derive_common_iv_context(a_18520,a_18521, default_aead_algorithm),partial_iv_18531),(CoAP_POSTCode, payload_18532),AAD(encrypt0_context,encrypt0(oscore_version_one, default_aead_algorithm,IDir_18528,partial_iv_18531)))))

A trace has been found.

~X_2 = Request(Header(a_18515,a_18516,a_18517,a_18518, a_18519),~M_19068,CoAP_Option_OSCORE_Option_empty, payload_from_ciphertext(~M_19071)) = Request(Header(

= Request(Header(
a_18515,a_18516,a_18517,a_18518,a_18519),token_18529,
CoAP_Option_OSCORE_Option_empty,payload_from_ciphertext(
enc_COSE_ciphertext(derive_key_context(a_18520,
IDir_18528,default_aead_algorithm,a_18521),aead_nonce(
IDir_18528,derive_common_iv_context(a_18520,a_18521,
default_aead_algorithm),partial_iv_18531),(CoAP_POSTCode,
payload_18532),AAD(encrypt0_context,encrypt0(oscore_version_one,
default_aead_algorithm,IDir_18528,partial_iv_18531)))))

Honest Process Attacker {1}new IDir_18528 {2}new IDri_18563 {3}new MasterSecret_18569 {4}new idcontext_18564 $(\sim M_18572, \sim M_18573, \sim M_18574) = (IDir_18528, IDri_18563,$ idcontext 18564) {6} insert security_context_lookup(IDir_18528,IDri_18563, MasterSecret_18569,idcontext_18564) Beginning of process oscore_initiator(IDir_18528) | Beginning of process init(IDir_18528, IDri_18563) | Beginning of process init(IDir_18528, IDri_18563) | $(\sim M_18572,a_18521) = (IDir_18528,a_18521)$ (a_18522,~M_18572,a_18523,~M_18\$72,a_18520,a_18521) [9] event beginBparam(IDir_18528) $= (a_1852\overline{2}, IDir_18528, a_1852\overline{3}, IDir_18528, a_18520,$ a 18521) {78} insert security_context_lookup(IDir_18528, IDir_18528, a_18520, a_18521) {42} get security_context_lookup(IDir_18528,IDir_18528, a_18520,a_18521) {13}new token_18529 {14}new partial_iv_18531 {19}new messageID_18530 {20} new payload_18532 $\sim X_1$ {31} event here ~X_2 {40} event endAparam(IDir_18528)