Abbreviations

-X 1 = aenc((groupkey request, sign(groupkey tequest, -M 2), -M), -M)

= aenc((groupkey request, sign(groupkey request, atts A), sign(aftst), ask 3)), pk(cask 3))

-M 8 = aenc(((groupkey reponse, attvid 3, gsk(attvid 3, gmk4, 4), gsk(attsk), 3), gsk(attvid 3, gmk4, 4), gsk(attsk), 3), gsk(attvid 3, gmk4, 4), gsk(attvid 3, gmk4, 4))

-X 2 = (-M 13, -M 14, pseudocert(getpseudock(-M 12, 3-proj-4-tuple(-1-proj-2-tuple(adcer(-M 8, -M 2)))))

-M 16 = aenc((gseudocert(pseudocert(pseudocsk), gsk(attvid 3, gmk4, 4)), revoke request), sign((pseudocert(pseudocert(pseudocert(pseudocert(attvid 3, gmk4, 4)), revoke request), sign((pseudocert(attvid 3, gmk4, 4)), revoke request), sign((pseudocert(attvid 3, gmk4, 4)), revoke request), sign((pseudocert(attvid 3, gmk4, 4)), revoke request), attsk(attvid 3, gmk4, 4), revoke request), attsk(attvid

