Abbreviations

~M\_2 = choice[aenc((groupkey request, sign(groupkey request, vsk 7), cert(vid 19,pk(vsk 7), cask 4)),pk(cask 4)),
aenc((groupkey request, sign(groupkey request, vsk 6), cert(vid 18,pk(vsk 6), cask 5)),pk(cask 5))]

~X\_1 = (~M\_3,~M\_4,~M\_5) = choice[(attvid 5,attsk 5,cert(attvid 5,pk(attsk 4), cask 4)), (attvid 4,attsk 4, cert(attvid 4,pk(attsk 4), cask 5))]

~M\_7 = choice[aenc((groupkey request, sign(groupkey request, vsk 9),cert(vid 21,pk(vsk 9),cask 4)),pk(cask 4)), aenc((groupkey request, sign(groupkey request, vsk 9), cert(vid 20,pk(vsk 8),cask 5)),pk(cask 5))]

~M\_8 = choice[aenc(((groupkey response, vid 19, gsk(vid 19, gmsk 4),gpk(gmsk 4)),sign((groupkey response, vid 19, gsk(vid 19, gmsk 4),gpk(gmsk 4)),cask 4)), pk(vsk 7)),aenc(((groupkey response, vid 18, gsk(vid 18, gmsk 5),gpk(gmsk 5)),cask 5)), pk(vsk 6))]

