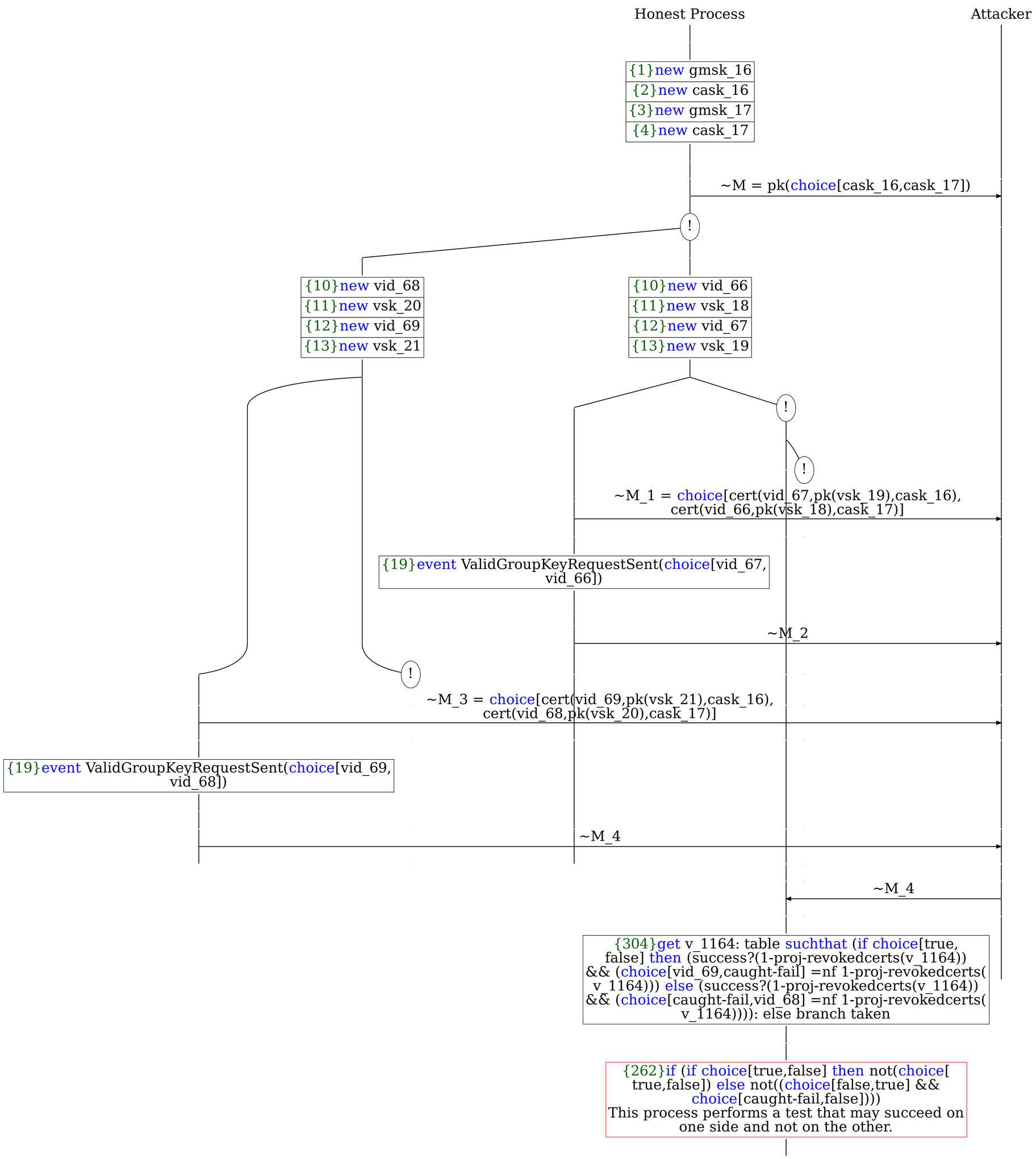
Abbreviations
~M_2 = choice[aenc((groupkey_request,sign(groupkey_request, vsk_19),cert(vid_67,pk(vsk_19),cask_16)),pk(cask_16)), aenc((groupkey_request,sign(groupkey_request,vsk_18), cert(vid_66,pk(vsk_18),cask_17)),pk(cask_17))]
~M_4 = choice[aenc((groupkey_request,sign(groupkey_request, vsk_21),cert(vid_69,pk(vsk_21),cask_16)),pk(cask_16)), aenc((groupkey_request,sign(groupkey_request,vsk_20), cert(vid_68,pk(vsk_20),cask_17)),pk(cask_17))]

A trace has been found.