Dear Dawin,

As per your request, Kakao Corp. ("Kakao") reviewed and analyzed your inquiries and findings with regard to the security and privacy issues of KakaoTalk 5.5.5 for Android. Based on the results of our internal analysis and the following fixes, we respond to you as follows:

Code	Title	Kakao's analysis	What fixes have been made	Application Schedule
KT-01-001	Improper WebView implementation	We do not find that this is a critical issue. However, we agree with you that there exists a vulnerability issue.	n/a	Under discussion
KT-01-002	Insufficient Transport Layer Protection	We find that this is not a significant one but decided that it would be better to improve this issue.	n/a	Under discussion
KT-01-003	WebViews Ignore Certificate Validation Warning Messages	We think that this is not a significant issue but decided that it would be better to improve this issue.	n/a	Under discussion
KT-01-004	Misconfigured TLS Endpoints	We agree with you on the finding in this issue.	We eliminated some algorithms vulnerable to security attacks	Completed
Miscellaneous	TLS Not used for all Network Connections	We find that this is a trivial issue but decided that it would be better to improve this issue.	HTTP requests are changed to HTTPS	Under discussion
Miscellaneous	KakaoTalk's oAuth Access Token may Lack Randomness	We find that there is no problem with this issue	No improvement is needed	n/a
KT-01-005	Lack of Message Integrity	Kakao currently employees Encrypt-and-Mac. Therefore, we find that there does not exist any security issue in this case.	No improvement is needed	n/a
KT-01-006	Vulnerable to Known Plaintext Attacks	We think that this is not a significant issue but decided that it would be better to improve this issue.	n/a	Under discussion

KT-01-007	Missing Freshness	We think that this is not a significant issue but decided that it would be better to improve this issue.	n/a	Under discussion
KT-01-008	Static Values	We find that there is no problem with this issue	No improvement is needed	n/a
	Miscellaneous	This is only related to old version. So there is no problem with this issue currently.	No improvement is needed	n/a
KT-01-009	Information Leakage	Under discussion	n/a	n/a
KT-01-010	User Tracking	We find that there is no problem with this issue	No improvement is needed	n/a
KT-01-011	Spam	We find that there is no problem with this issue	No improvement is needed	n/a

If you have any inquiry with regard to this reply, please do not hesitate to contact me at allen.kim@kakaocorp.com. We look forward to hearing from you again.

Yours sincerely,

Myeongsu Allen Kim

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Kakao Corp.

Policy Support Team/ Foreign Legal Counsel (D.C., USA)

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