

Security and Discoverability

Why does security matter?

Given the types of actions XR does, **it is essential that the authorities do not get access to rebels' personal information and private messages**. This is for a number of reasons including:

- It could compromise the legal defences of arrestees
- It could affect the right of rebels to stay in the UK

When discussing security in the context of messaging apps, there are two main things to think about:

- Can my messages get intercepted?
- Where are the messages getting stored?

The first of these is straightforward - to make sure messages cannot be intercepted we need to make sure that the app uses secure encryption when sending messages. The second, however, is a little more complicated as it depends on terms like "end-to-end encryption".

End-to-end encryption is used by a number of messaging apps. What it means is that the messages are stored on the phones sending and receiving the messages, rather than on some server. This is generally good from a security standpoint because the authorities would need to access one of the phones in order to see the messages; something much harder for them to do than approach the owners of the server with a warrant.

Another important things to consider when choosing a messaging app is whether or not you want to have **disappearing messages**. These are messages that are automatically deleted after a certain time period, usually around a week or so. This can provide an additional layer of security on top of end-to-end encryption.

Lastly, one extremely important thing to bear in mind when discussing security is that **by far the biggest weakness in XR's security is the people**. It is very easy for an undercover police officer to pose as a protester and get themselves added to a 'secure' group chat. Once that happens, any security features of the messaging app become irrelevant since the authorities can see everything that is getting discussed.

[Head to this page for an comparison](#) of WhatsApp, Telegram, Mattermost and Signal.

If you're organising actions, head over to the [Internal comms for your action](#) page to read about chat security in more detail.

Why does discoverability matter?

Discoverability - making your group easy to find and get in touch with - is a huge issue for XR. We are a decentralised organisation so each group has the freedom to decide how they want to organise and communicate. This is fantastic from the point of view of self organising, but it makes it difficult to share knowledge and skills across groups. To try and reduce this problem, it is important when choosing a messaging app to think about how other rebels and groups can find your group and get in touch with you.
