

# hopcast

Several technologies are allowing direct communications between mobile devices, such as Wi-Fi Direct, Bluetooth, BLE, Apple MPC, Google Nearby, LTE D2D, etc. More and more devices, ranging from smartphones to connected things, embed these technologies but under-explore their features, and they are, in general, difficult to deploy at a large scale.

**Hopcast** proposes a solution to efficiently use direct communication links between mobile devices by leveraging meaningful user-level relationships to orchestrate data exchanges. Thanks to **Hopcast's** algorithms and intelligent engine, new possibilities arise:



**New markets.** By using direct communications, content providers are less dependent on the presence of broadband cellular infrastructure, which opens markets in emerging countries and in poorly covered areas.



**Energy efficiency.** Devices' communication interfaces are activated only when necessary. This avoids costly energy waste during the neighbor discovery phases, which helps extend the battery lifetime of the devices.



**Transparent activity.** **Hopcast** decides, in a dynamic fashion, what content to transmit, and at what exact time. The user does not have to intervene at all times to determine if communication should take place or not.



**Respect of data ownership.** **Hopcast** never gets a copy of the data. By promoting direct communication between senders and receivers, it allows better control over where data is stored.



**Save users data plan.** By using direct communications, users download considerably less data from the cloud and therefore use less cellular communication. They reduce then their phone bill.



**Reduce CDN load.** By enabling their customers to reduce the amount of data downloaded from the cloud, content providers reduce the load on the CDNs they use and lower their costs accordingly.

**Hopcast** is an outcome of more than ten years of tight collaboration among Sorbonne Université, CNRS, and Thales. The core technology can be easily integrated into any mobile application. Thanks to advanced algorithms for nearby user interactions on the move and a subtle understanding of the underlying laws governing human mobility, **Hopcast** makes the bridge between content distribution and the physical space.



With **Hopcast**, users can exchange significant amounts of data, from music files to videos, under the control of the content provider, including in areas of poor cellular coverage. **Hopcast** promotes the internet of proximity, a vast market that could not be adequately explored yet because of technological limitations.