

Next up: Charge earbuds wirelessly with NFC

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It's going to get a lot easier to wirelessly charge earbuds and smart watches following the release of upgraded specifications for Near Field Communication (NFC) technology.

The NFC Forum announced Tuesday the adoption of new standards that will permit the wireless charging of small battery-powered consumer devices using a smartphone and other NFC-capable devices.

The new standard, called Wireless Charging Specification (WLC), can transmit both data and power wirelessly to NFC-equipped devices. Charging capacity will be capped at 1 watt, which is sufficient for small devices such as earbuds, security fobs, fitness trackers and digital pens. Larger devices such as smartphones and laptops require greater charging capacity and would not benefit from the new specifications. For those devices, Qi wireless technology that provides up to 14 watts of power remains the standard.

Qi technology requires components that may be too large or too for smaller, less-expensive devices.

But 2 billion users of NFC-enabled devices will be able to take advantage of the new process.

According to NFC Forum chairman Koichi Tagawa, "NFC wireless charging is truly transformative because it changes the way we design and interact with small, battery-powered devices as the elimination of plugs and cords enables the creation of smaller, hermetically-sealed devices."

It is not yet known if WLC will be backward compatible with existing NFC-equipped devices or if firmware updates will be required. The changes won't come immediately. The specs were just announced this week and manufacturers will likely require a couple of years or more to

design and implement the new standards.

Another benefit of WLC is that it may usher in a new era of interchangeability of devices, with one manufacturer's charging station being capable of powering another manufacturer's [device](#).

Apple was reported to have been utilizing bilateral charging for the iPhone 11, but it has not yet done so. An earlier protocol with similar technology, called Wireless Powershare, was unveiled with the Galaxy S10 and Galaxy Buds earphones last year. And Huawei used similar technology in its Mate 20 Pro.

The NFC Forum is a non-profit industry association comprised of leading [mobile communications](#), semiconductor and consumer electronics companies. They include Apple, Sony, Google, Samsung and Huawei. The Forum's mission is "to advance the use of Near Field Communication technology by developing specifications, ensuring interoperability among devices and services, and educating the market about NFC technology."

More information: nfc-forum.org/nfc-forum-approval-specification/

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