

NFC Forum N-Mark for Tags and Media Frequently Asked Questions

What is the NFC Forum N-Mark ("N-Mark")?

The NFC Forum has developed a registered "N-Mark" so that consumers can easily identify where their NFC-enabled devices can be used. It is a stylized "N" and indicates the spot where an NFC tag is readable by an NFC device.



How can the N-Mark be used?

Thanks to NFC technology, consumers will be able to "pick up" information from their environment. NFC technology allows personal devices to read and use or display information stored in tags, which can be embedded in everyday objects such as posters, bus stop signs, street signs, medicine bottles, magazine pages, food packaging, and much more. Some examples where NFC technology can help you capture information or trigger a chain of events are:

- We all walk past billboards and posters advertising products, but how often do we remember to act on our interest? An NFC-enabled phone can display and store the information and allow you to immediately act—before you forget.
- When sightseeing, you can take a picture of popular attractions and historic buildings with your NFC camera phone, then touch the NFC phone to read informational tags embedded outside the venues. When you get home, you can match the pictures to the text you stored describing what you saw.
- At sports stadiums, you can use your device to read tags embedded in information posts or seats download video scenes from the game, team information, and tickets for upcoming events.
- NFC tags can be embedded in special documents like parking permits and admission tickets to prove authenticity.

Who will use the N-Mark?

Tags can be embedded in many formats, as stated above. The N-Mark could be applied by the business owner, advertising agency, tag maker, or media developer.

How do I get the N-Mark?

The N-Mark is available to anyone by download, free of charge, at the NFC Forum website (www.nfc-forum.org/N-Mark) through a simple click-through license. N-Mark Trademark Usage Guidelines for Tags and Media are provided with the N-Mark, and users are encouraged to follow the guidelines for implementation to ensure global consistency.

What specifications must be met in order to use the N-Mark?

Tags using the N-Mark **must**:

- Comply with the NFC Data Exchange Format (NDEF) Technical Specification, which specifies a common data format for NFC Forum-compliant devices and NFC Forum-compliant tags
- Be readable by NFC-enabled devices implementing any of the NFC Forum Tag Type 1-4 Operation Specifications

NFC Forum specifications are available for download free of charge at the NFC Forum website at www.nfc-forum.org/specs/.

What other specifications support tag usage?

To support tag usage and deployment, the NFC Forum has created several optional Record Type Definition (RTD) Technical Specifications. These specifications may be used for applications that include these specific record types:

- NFC Text RTD Technical Specification (for records containing plain text)
- NFC Uniform Resource Identifier (URI) RTD Technical Specification (for records containing a URI)
- NFC Smart Poster RTD Technical Specification (for records with text, audio or other data)
- NFC Generic Control RTD Technical Specification (to request a specific action through NFC communication)
- NFC Signature Record Type Definition (RTD) Candidate Technical Specification (for signing single or multiple NDEF records)

NFC Forum specifications are available for download free of charge at the NFC Forum website at www.nfc-forum.org/specs/.

Can I use the NFC Forum N-Mark with proprietary RTDs (those not based on or interoperable with NFC Forum-defined RTDs)?

The NFC Forum has no plans to write all the RTDs that might be useful, expecting that other organizations will write their own. Also, an NFC Forum-compatible device does not have to have any particular applications installed; therefore, although it can read NDEF data from a tag, there is no guarantee that it will do anything with it. So, what the N-Mark communicates is that there is NDEF-formatted data on the tag that can be read in a standard manner.

The NFC Forum has created a specification for use by organizations that create Record Type Definitions for their own record types:

- NFC Record Type Definition (RTD) Technical Specification

User-defined RTDs **must** conform to the RTD structure defined by the NFC Record Type Definition (RTD) Technical Specification. This specification defines the format and rules for building standard record types based on the NDEF data format. The RTD specification provides a way to efficiently define record formats for new applications and gives users the opportunity to create their own applications based on NFC Forum specifications.

In which countries is the N-Mark registered?

An up-to-date list of the countries in which the N-Mark is registered can be found at www.nfc-forum.org/N-Mark.

What happens if I use the N-Mark in countries where it is not registered?

N-Mark users are not shielded from liability in jurisdictions where it is not registered or otherwise protected.

Where do I get tags?

There are many commercial tag manufacturers, most of whom are members of the NFC Forum. See the list of members and their capabilities at www.nfc-forum.org/member_companies.

How should I migrate from my old target mark to the new NFC Forum N-Mark?

This is a matter of cost and timing for the provider and will normally follow a reasonable migration process. Since the NFC Forum N-Mark is a global standard, those who have implemented proprietary marks are encouraged to make this change as soon as possible to ease consumer confusion. The N-Mark can also be used in conjunction with proprietary marks to let out-of-market consumers know NFC services are available.

Can the N-Mark be placed on NFC-enabled devices as well?

When a device passes certification testing, the N-Mark can be used to indicate the spot on the device where it reads NFC tags.

Where is the N-Mark in use?

The N-Mark has been used by various NFC Forum members in trials and projects around the world. These are now being updated to ensure the mark is used with Forum-supported tag types.

What is the NFC Forum?

The NFC Forum, www.nfc-forum.org, was launched as a non-profit industry association in 2004 by leading mobile communications, semiconductor, and consumer electronics companies. 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. The Forum's 130 global member companies are currently developing specifications for a modular NFC device architecture and protocols for interoperable data exchange and device-independent service delivery, device discovery, and device capability.

The NFC Forum's Sponsor members, which hold seats on the Board of Directors, include leading players in key industries around the world. The Sponsor members are: Broadcom Corporation, INSIDE Contactless, MasterCard Worldwide, Microsoft Corp., NEC, Nokia, NTT DOCOMO, Inc., NXP Semiconductors, Renesas Technology, Samsung, Sony Corporation, STMicroelectronics and Visa Inc.