



# New paradigm for NFC

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# New Paradigm for NFC

Leverage all of NFC technology!



# Close Encounters of the 5<sup>th</sup> Kind

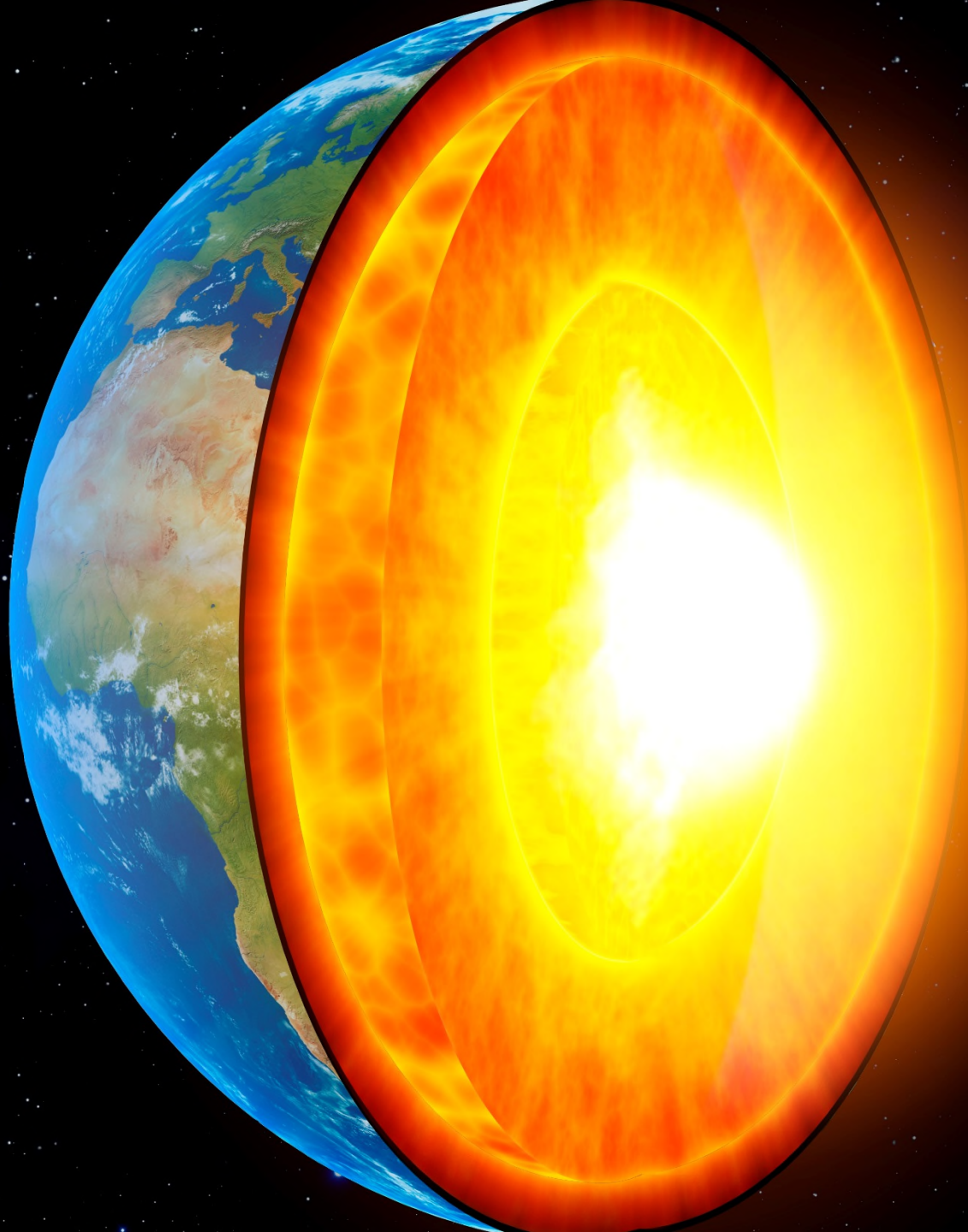
The NFC Forum recently added Type 5 tags to their specifications

# 5

- Activation **energy**
- Improving NFC **user experience**
- **Ubiquitous NFC**: connecting more “Things” to the **IoT**
- From **factory** to **consumers**
- **Interoperability** and consistency

# 1

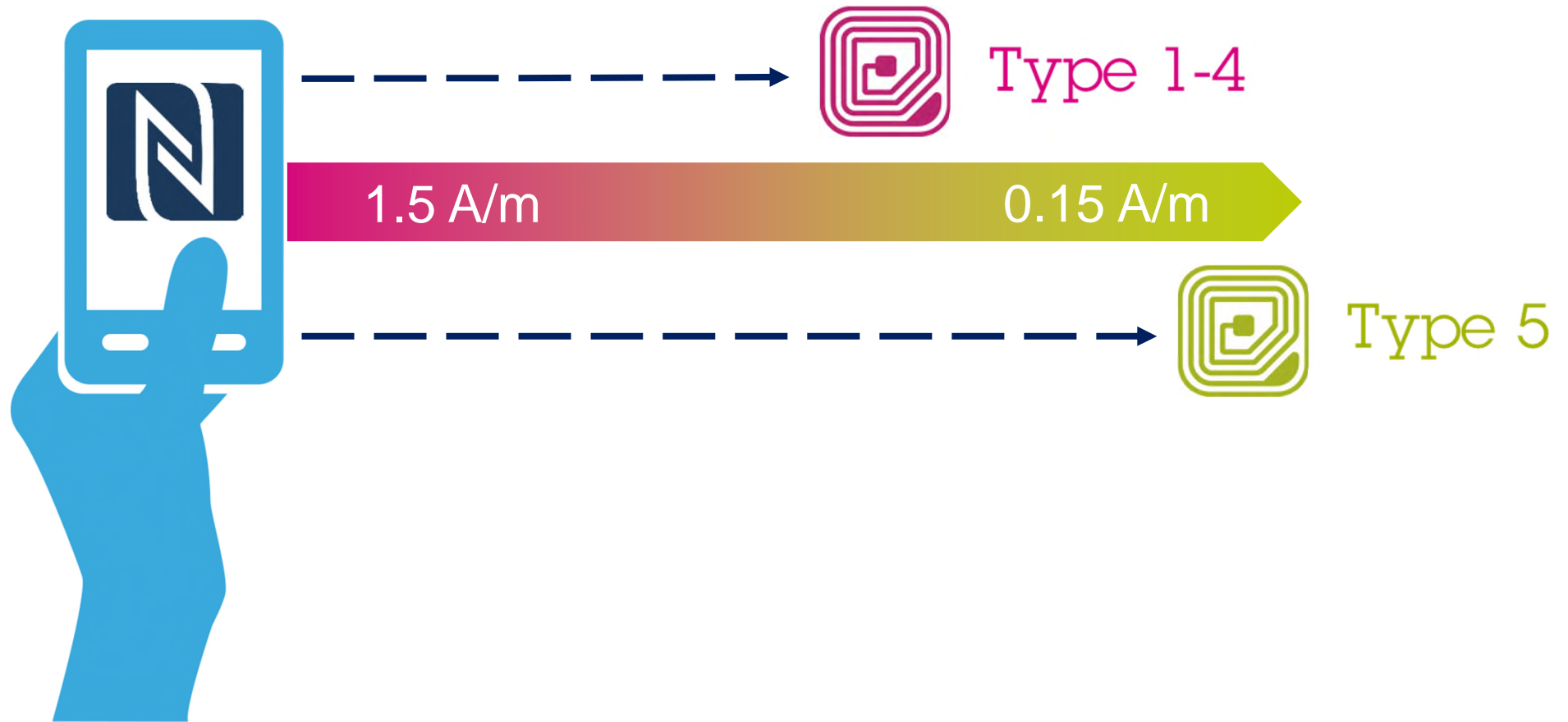
## Activation Energy



# Activation Energy

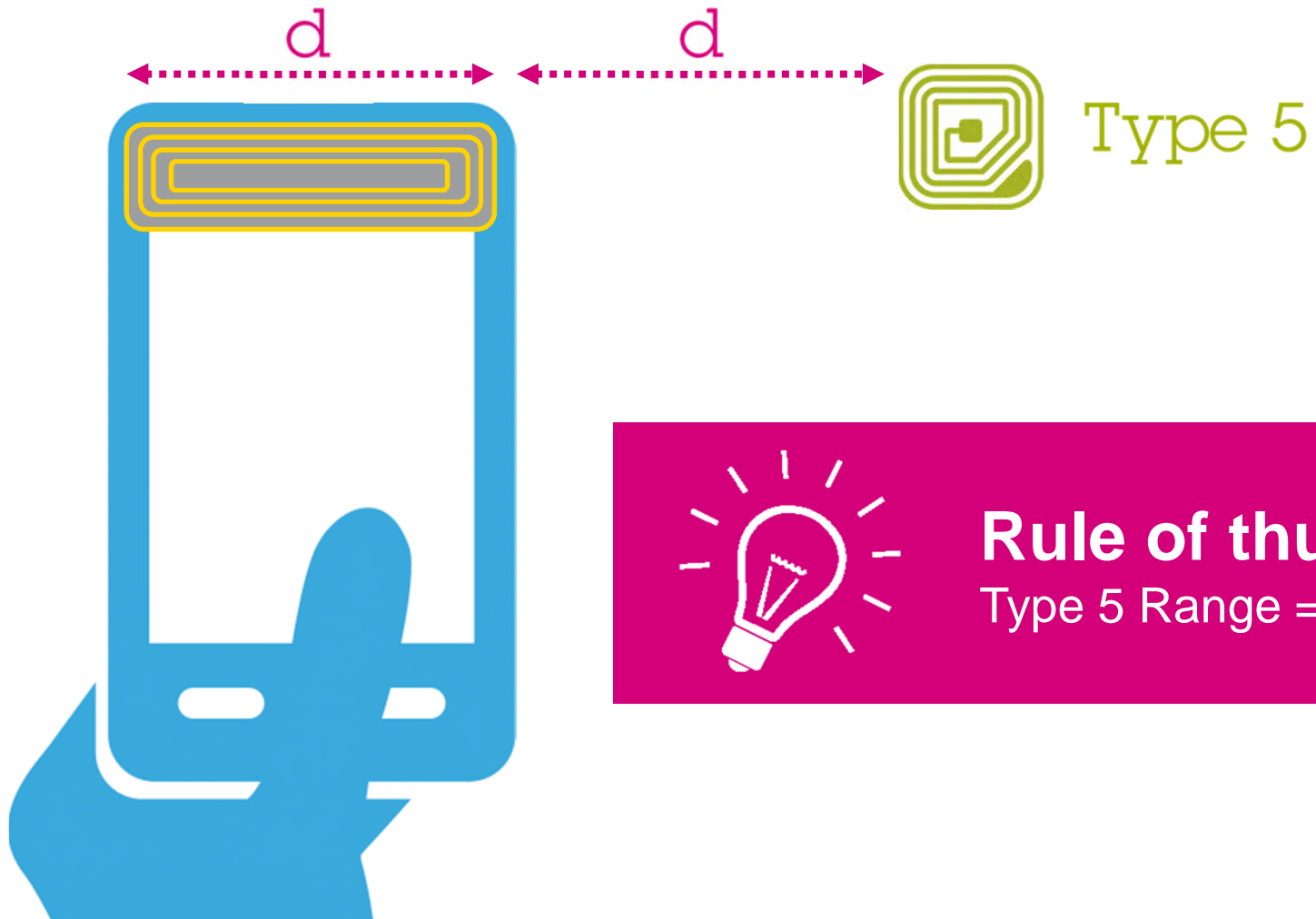
the Lower the Better!

Type 5 tags are lower power, enabling better range



# Type 5... an Extra Boost

NFC remains near field communication



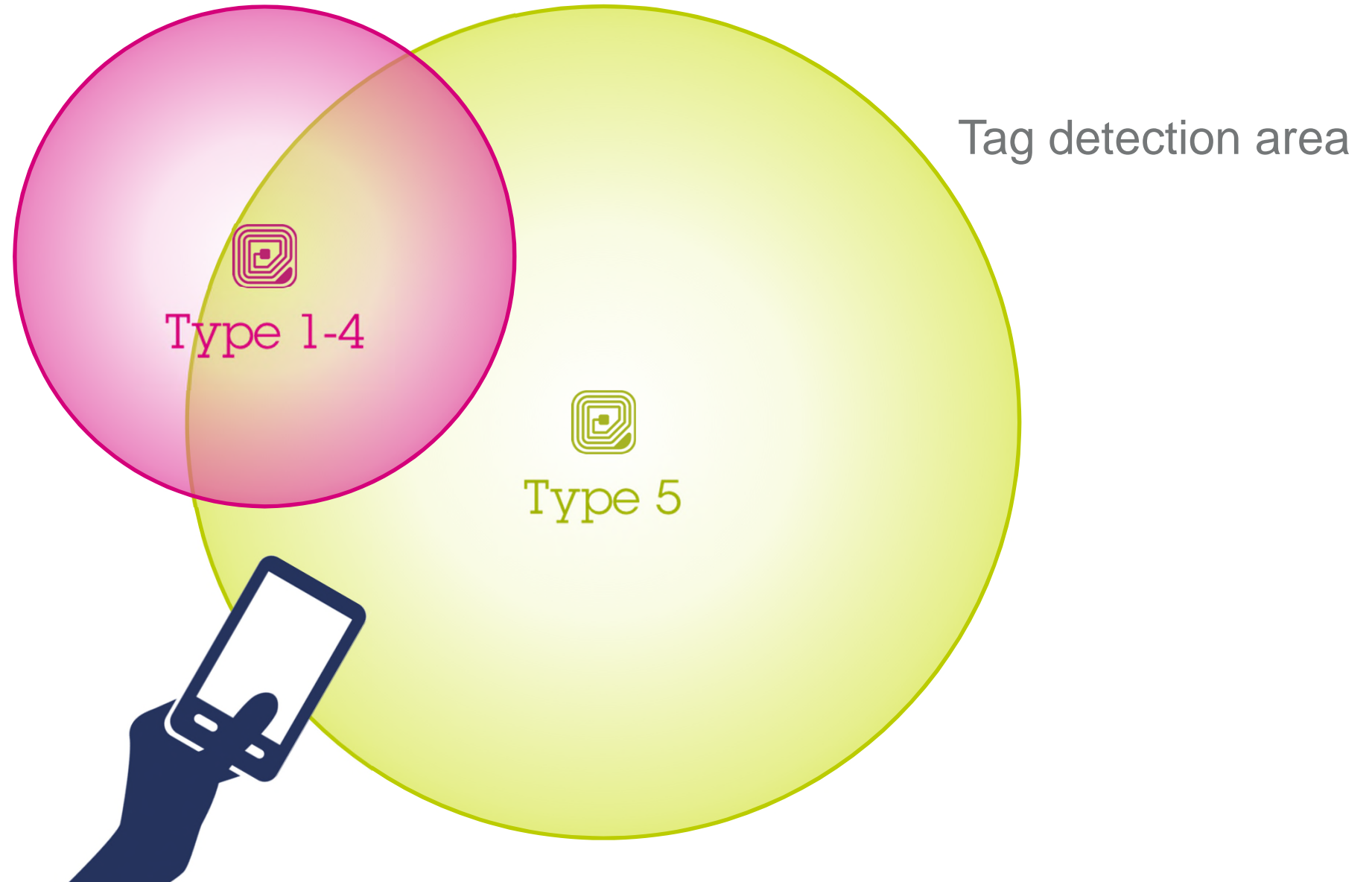
**Rule of thumb:**  
Type 5 Range = Reader's antenna size

# 2

## User Experience



# Type 5 Makes Discovery Much Easier





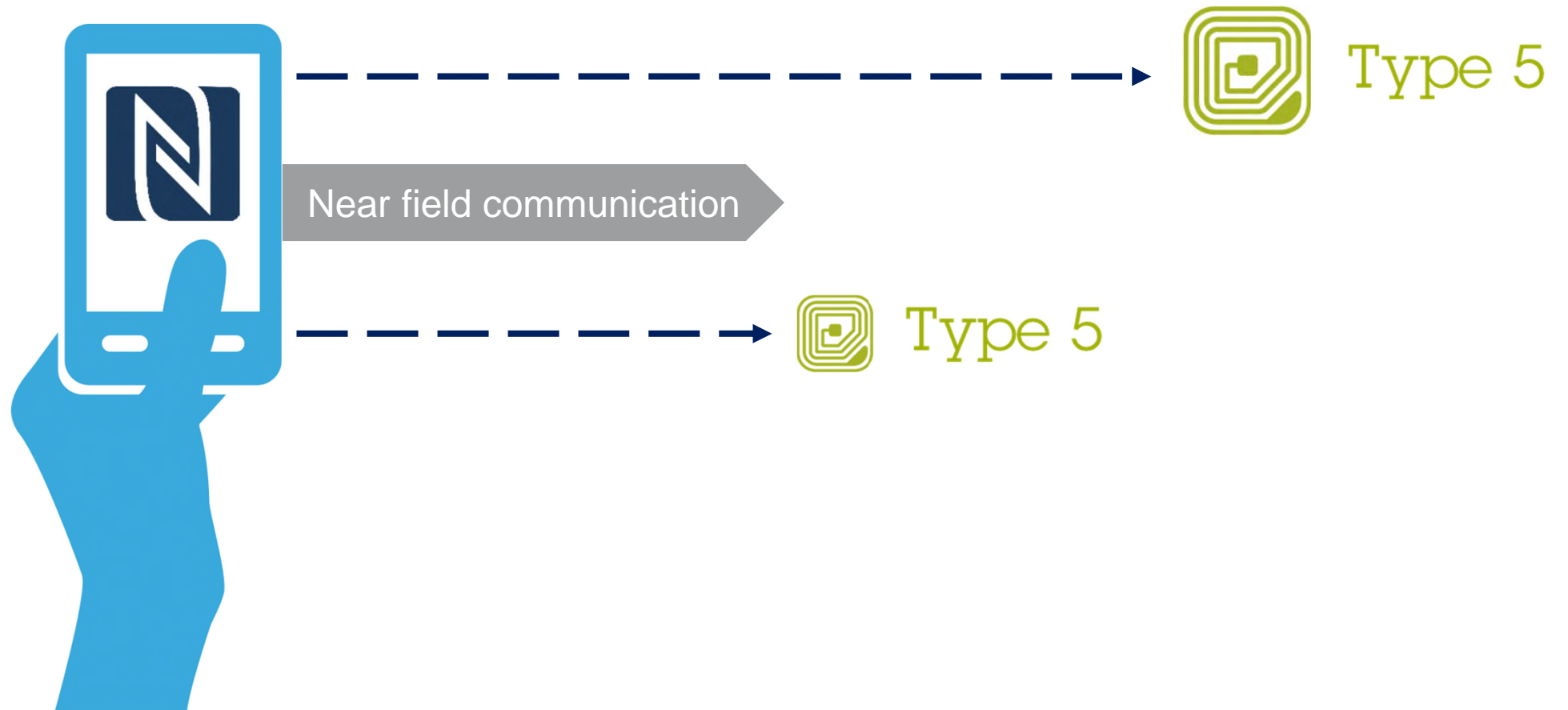
# 3

## Ubiquitous NFC



# Type 5... an Extra Boost!

Enabling smaller antennas for near field communication

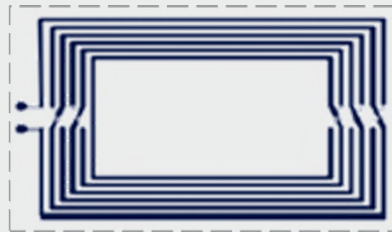


# Ubiquitous NFC

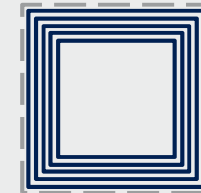
## It is all About Integration

Small antennas, a better fit for IoT

Type 1-4



Type 5



# 4

From  
Factory to  
Consumer



# From Factory to Consumer

## Bridging RFID and NFC



**ISO**  
15693

**1 meter**  
few feet

**NFC**  
Type 5



5

# Consistency and Interoperability

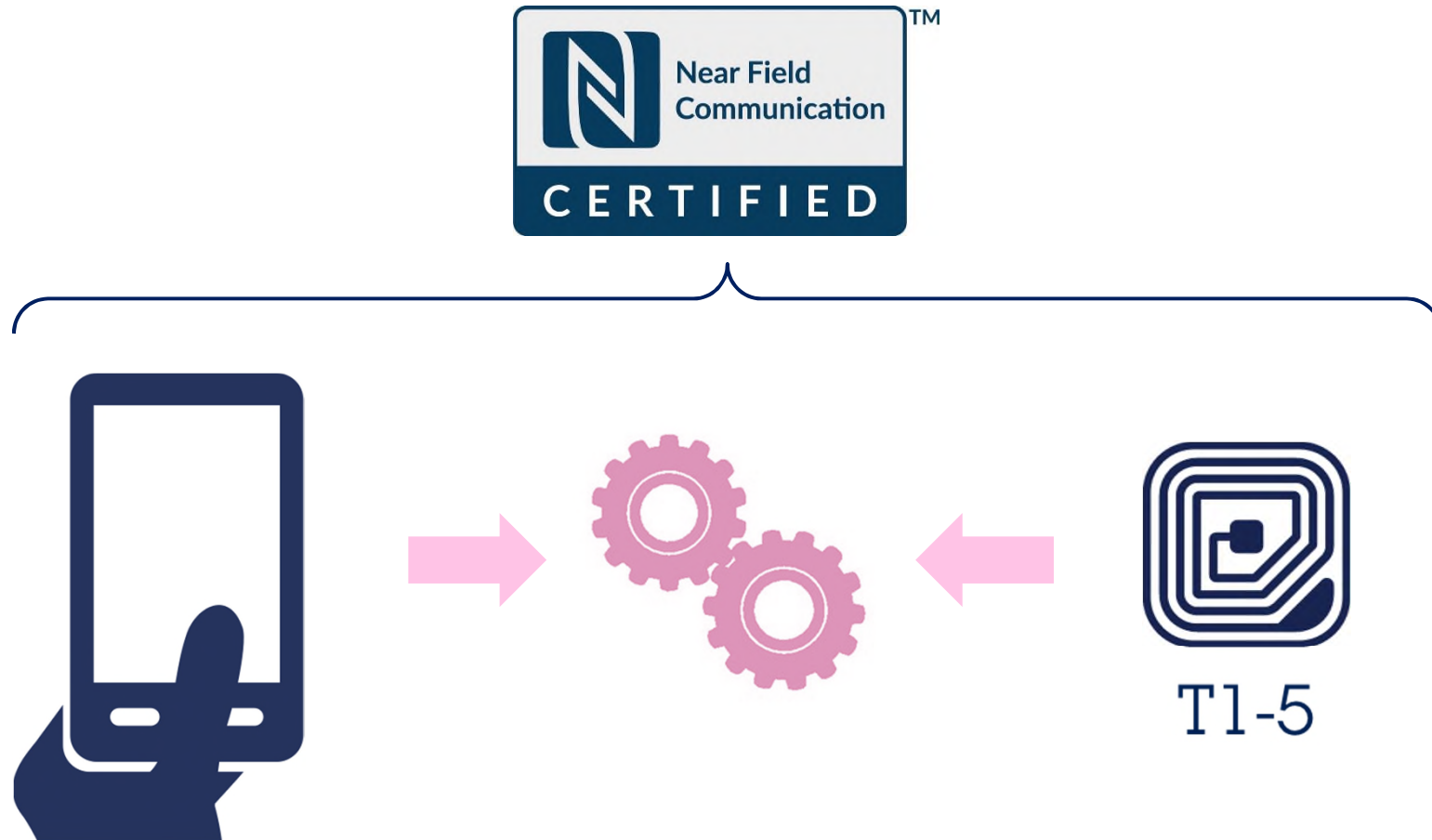


# Consistent User Experience

## Better Interoperability

15

NFC Forum Certification Program extended to Device & Tag



# ST is a Proud Member of the NFC Forum

The screenshot shows the NFC Forum website's 'Certified Products' page. At the top, there is a navigation bar with the NFC Forum logo, social media icons, a search bar, and a 'Member Log In' button. Below the navigation bar, there are tabs for 'Universal Devices', 'Reader Devices', and 'Tags'. The 'Universal Devices' tab is selected. A table lists six certified products from STMicroelectronics, each with a certification release date and a certification number. A bracket on the right side of the table points to the 'Near Field Communication CERTIFIED' logo.

Manufacturer	Product Name	Certification Release	Release Date	Certification Number
STMicroelectronics	*ST25TV64K	Certification Release 11	10/03/17	58534
STMicroelectronics	*ST25TV02K	Certification Release 11	10/03/17	58533
STMicroelectronics	*ST25TV02K-AD	Certification Release 11	10/03/17	58532
STMicroelectronics	*ST25DV64K	Certification Release 11	10/03/17	58528
STMicroelectronics	*ST25TV Reference design	Certification Release 11	09/25/17	58519
STMicroelectronics	*ST25DV Reference design	Certification Release 11	09/25/17	58518

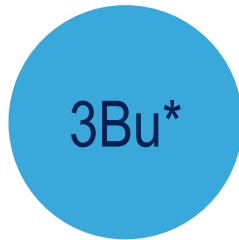




# From Smartphone to IoT

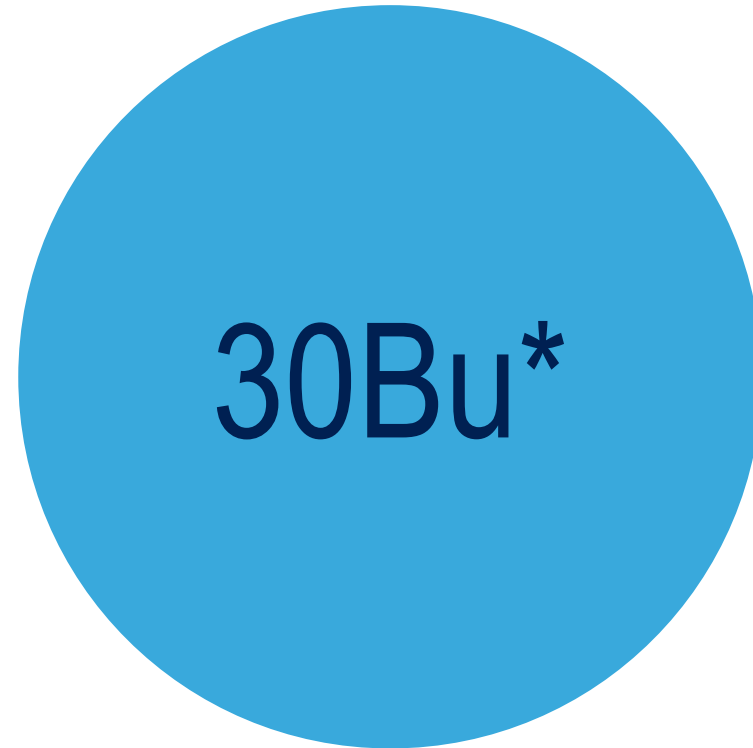
Type 5 is the opportunity to expand NFC footprint

Smartphones



10x

Things



# 5 Paradigms of NFC Type 5

1

Activation  
Energy

2

User  
Experience

3

Ubiquitous  
NFC

4

From  
Factory to  
Consumer

5

Consistency

# From NFC for Payment...



# ... to NFC for IoT!



# Solutions for NFC / RFID Tags and Readers

