



**ADVANCING NEAR
FIELD COMMUNICATION
TECHNOLOGY**



NFC Forum 2009

What's Ahead

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Chairman

4 November 2008

**Thank you to Christophe Duverne
for his vision and leadership!**

We have come a long way, but there is much to do

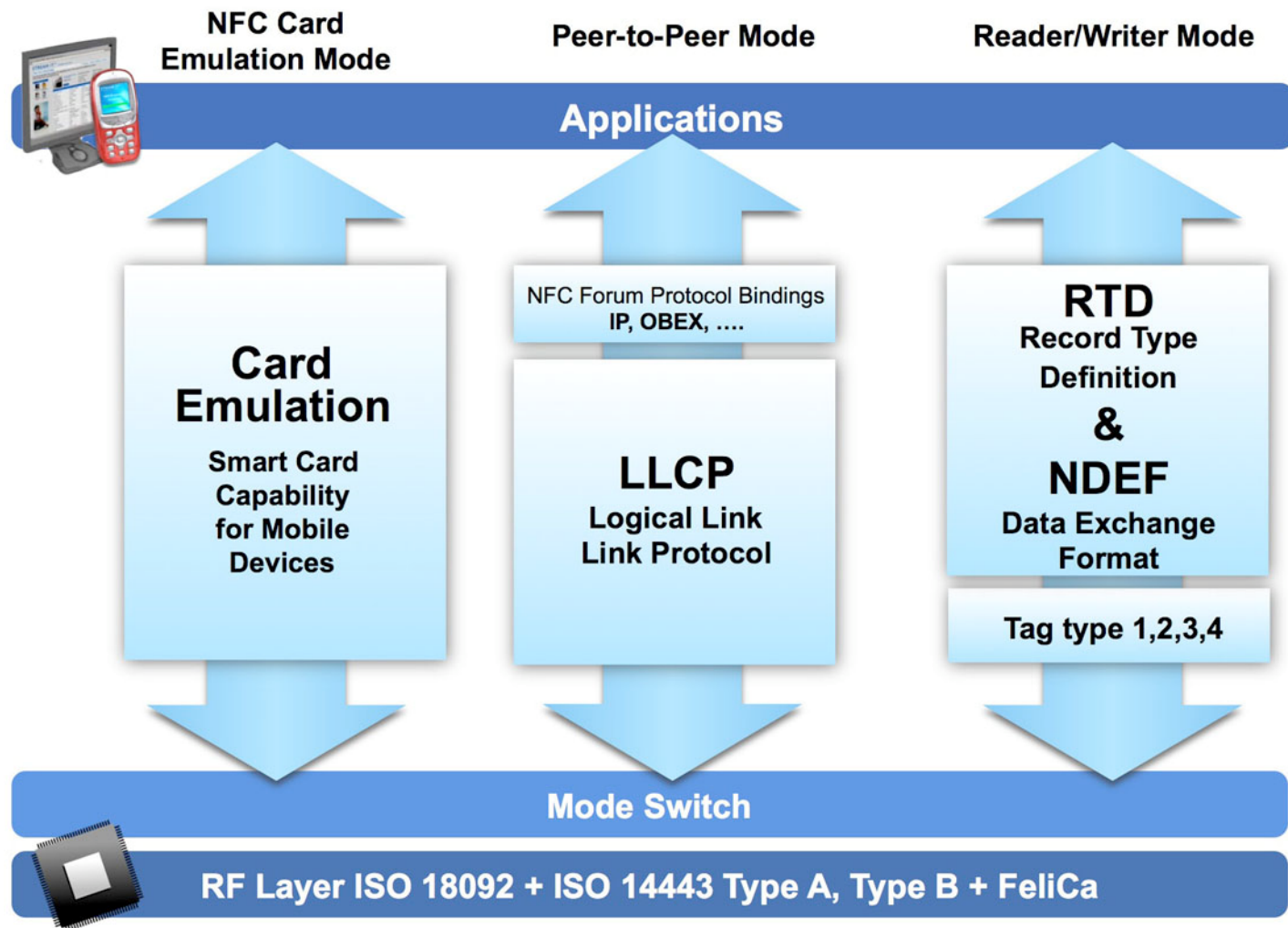
- Consumer feedback from projects has been extremely positive
- We now understand the complexity of the ecosystem and are sharing lessons learned in projects around the globe
- The NFC Forum still faces major milestones to facilitate development and deployment and ensure interoperability
- The best talents, companies and knowledge in the NFC industry are in the NFC Forum and will work together to make NFC grow

Coming Soon

- New specifications
- Compliance Program, with testing tools and mechanisms to establish product and service interoperability
- Aggressive outreach to other organizations and more liaison agreements
- Expanded use of the target mark and (coming soon!) the certification mark

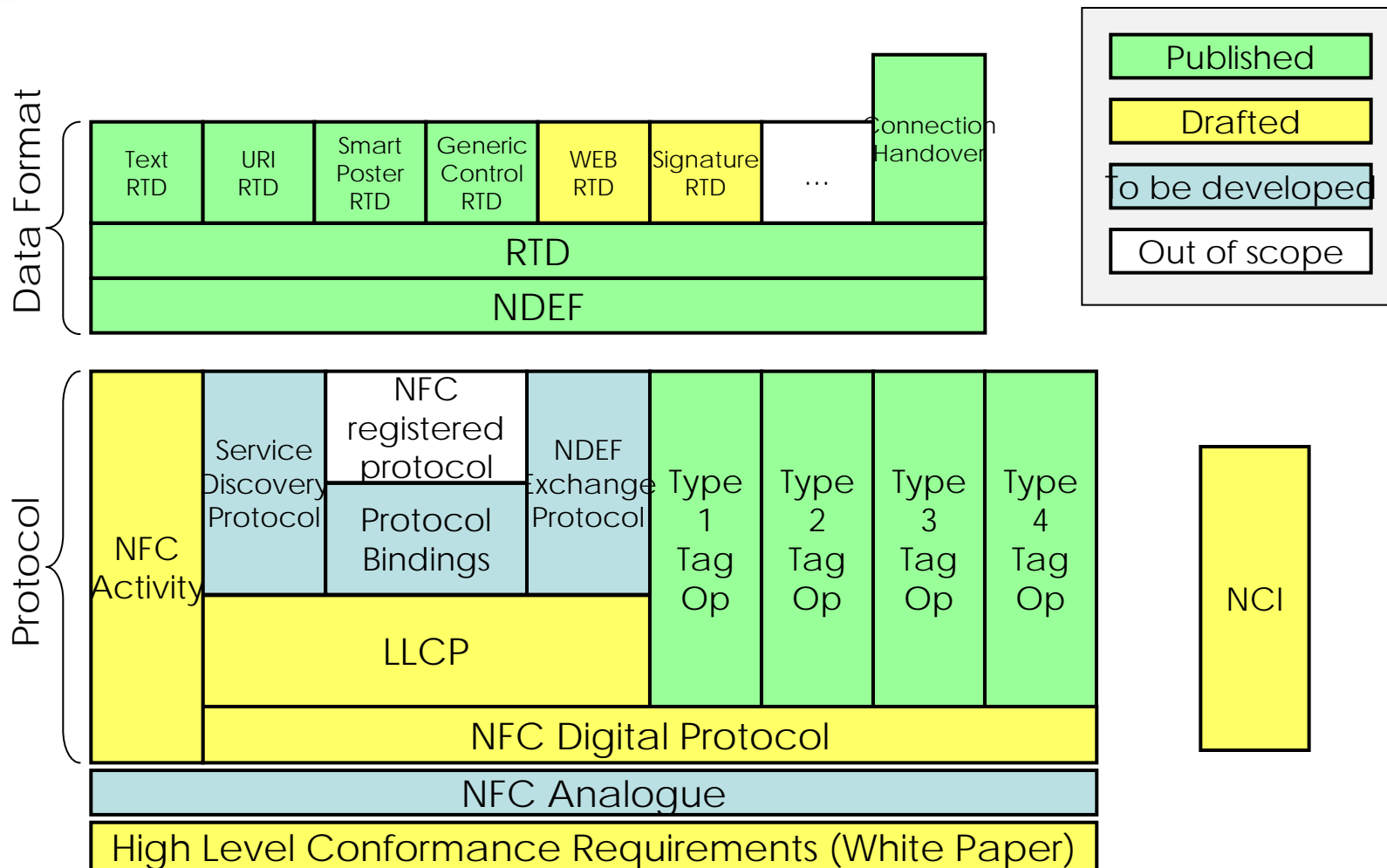


NFC Forum Technology Architecture



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Overview of Specifications



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*NCI : Logical Interface between Device Host and NFC Controller

Eleven Specifications Released to Date

Specification

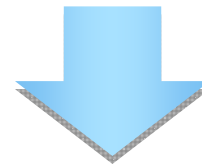
Purpose

- **NFC Data Exchange Format (NDEF)**
- **NFC Record Type Definition (RTD)**
- **Smart Poster RTD**
- **Text RTD**
- **Uniform Resource Identifier (URI) RTD**
- **Generic Control Record Type Definition (RTD)**
- **Connection Handover candidate specification**
- **NFC Tag Types 1-4 Operation**

- Common data format for devices and tags
- Standard record types used in messages between devices/tags
- For posters with tags with text, audio or other data
- For records containing plain text
- For records that refer to an Internet resource
- Way to request an action
- How to establish a connection with other wireless technologies
- Defines RW operation for NFC tags

Specifications in Progress

- **Mode Switch Specification**
 - Fulfills the promise of multi-function
- **Logical Link Control Protocol (Peer-to-Peer Specification)**
 - Defines the protocol to manage the logical link between NFC Forum devices (based on ISO 18092 / NFCIP-1)

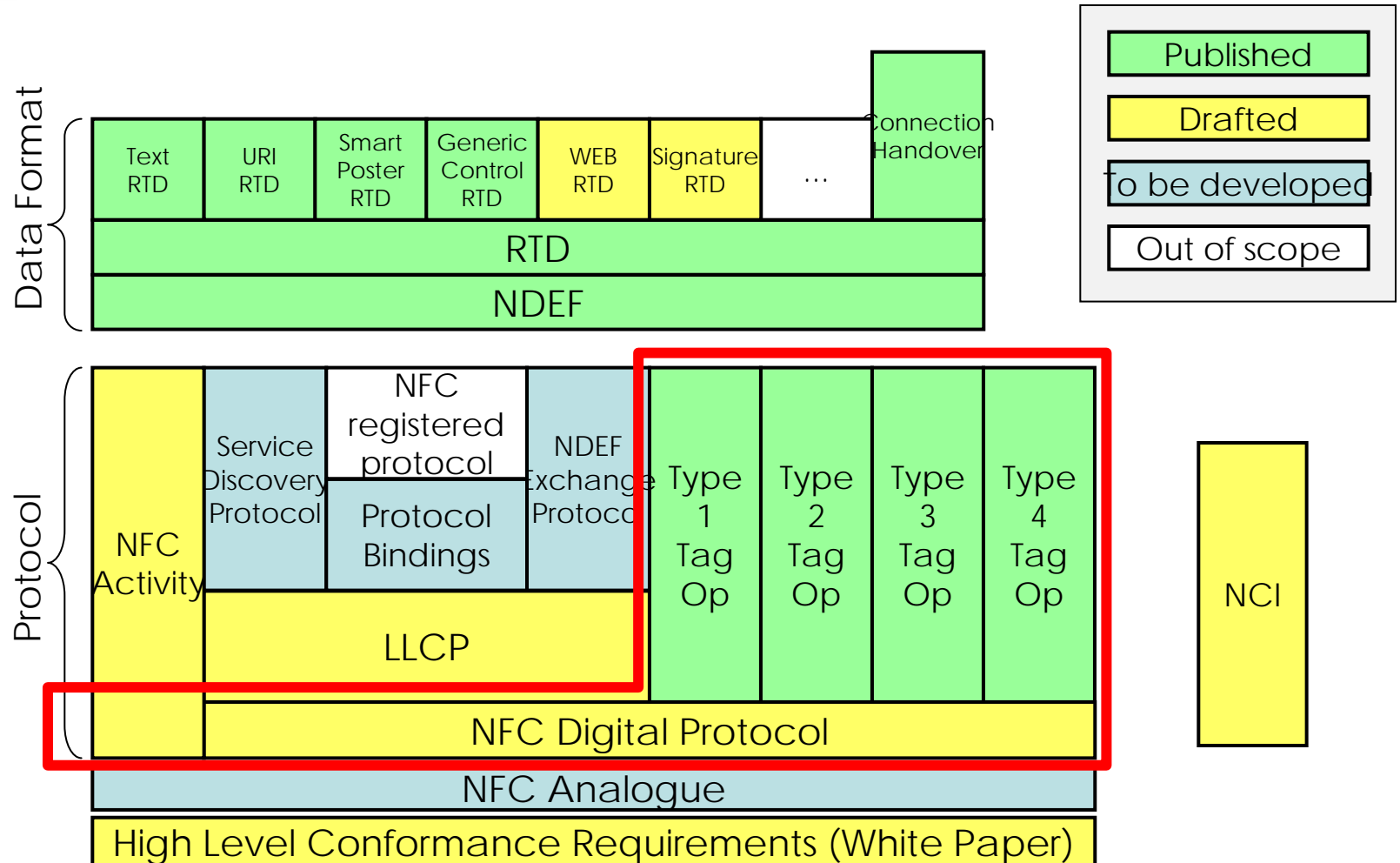


Foundation for Device Interoperability
Anticipated availability 1Q'09

Compliance Program

- **HLCR (High Level Conformance Requirements)**
 - Recommendations for establishing compliance and interoperability with the NFC Forum's published open standards
- **Testing and Compliance Program**
 - A product certification program with a consumer recognizable trademark guaranteeing the NFC brand promise of compliance and interoperability
 - Will soon announce appointment of The Open Group as compliance program administrator

Scope of Compliance Program



- Security Technical Working Group dedicated to addressing issues
- Signature RTD specification provides a way to digitally sign data
- Complete analysis of security use cases and threats
 - Threats analysis
 - Countermeasures analysis
- Security FAQs in progress
- Expect to work with other industry organizations



Marketing Efforts Continue

- Marketing Communications
 - White Papers for verticals, developers
 - Webcasts
- NFC Forum Events
 - Spotlights for verticals
 - In-depth training for developers
 - Plugfests for interoperability
- NFC Forum Global Competition
 - Open to commercial and research tracks
 - Winners announced at WIMA, Monaco, April 2009
- Logo and Trademark
 - Develop and promote adoption of the logos and trademarks of the NFC Forum



Future Challenges

Beyond Mobile



Interoperability based on NFC Forum specs

Farsighted Scope of the NFC Forum

- Extends to consumer electronic devices
 - Personal computers
 - TVs
 - Other household appliances
- Many applications do not require the high level of security seen in projects with payment and transport, and these too are areas of interest for the NFC Forum
- Members of the Forum are responding to market demands to work together to enable new applications on new devices

Getting NFC to Market... Now!

- The ecosystem is complex
- We have learned a lot from early programs
- Our main objective is to focus on these “lessons learned” to aggressively push NFC deployment

Watch Us Grow!

- Major Milestones 2009
 - Completion of core specifications
 - Rollout of the compliance program
- Enabling more products in the market and growing commercial deployments

The NFC Forum has coordinated entrepreneurs full of enthusiasm to achieve our mission of nurturing and enhancing the ecosystem!

In Conclusion...

Thank you for joining us!

***And come visit the NFC Zone
Hall 4, Booth Q 104***