



LTE-Assisted WiFi Direct

Cellular Traffic Offloading onto WiFi Direct

15th FRUCT Conference

Jussi Niutanen, PhD student at Tampere University of Technology, Intel Finland

Intel Information Technology



TAMPERE UNIVERSITY OF TECHNOLOGY



The cellular problem

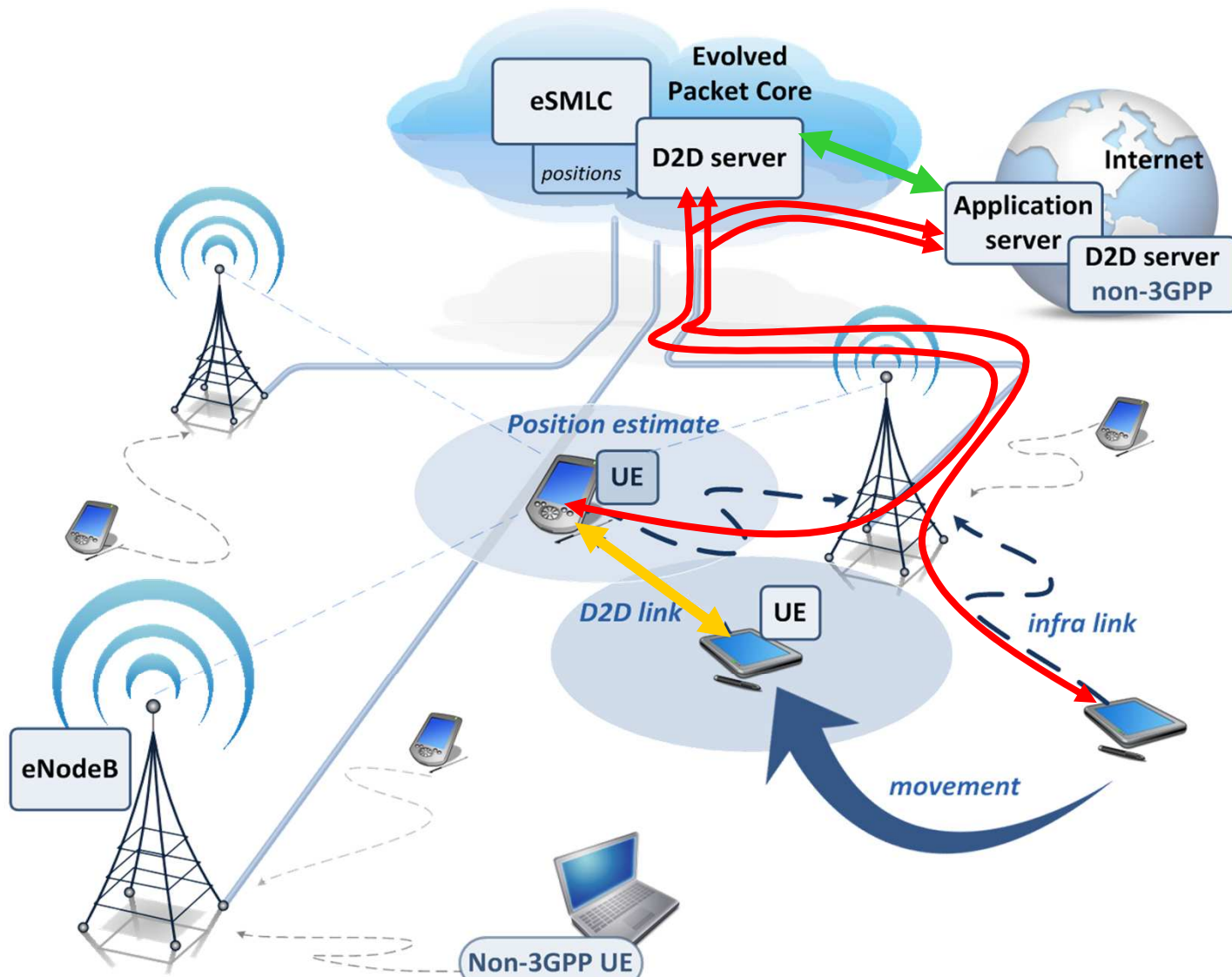
- Mobile traffic doubles annually
- Density of nodes expected to skyrocket w/ IOT
- Diversity of service requirements increasing from variation in devices, apps, usages, etc.

Future needs

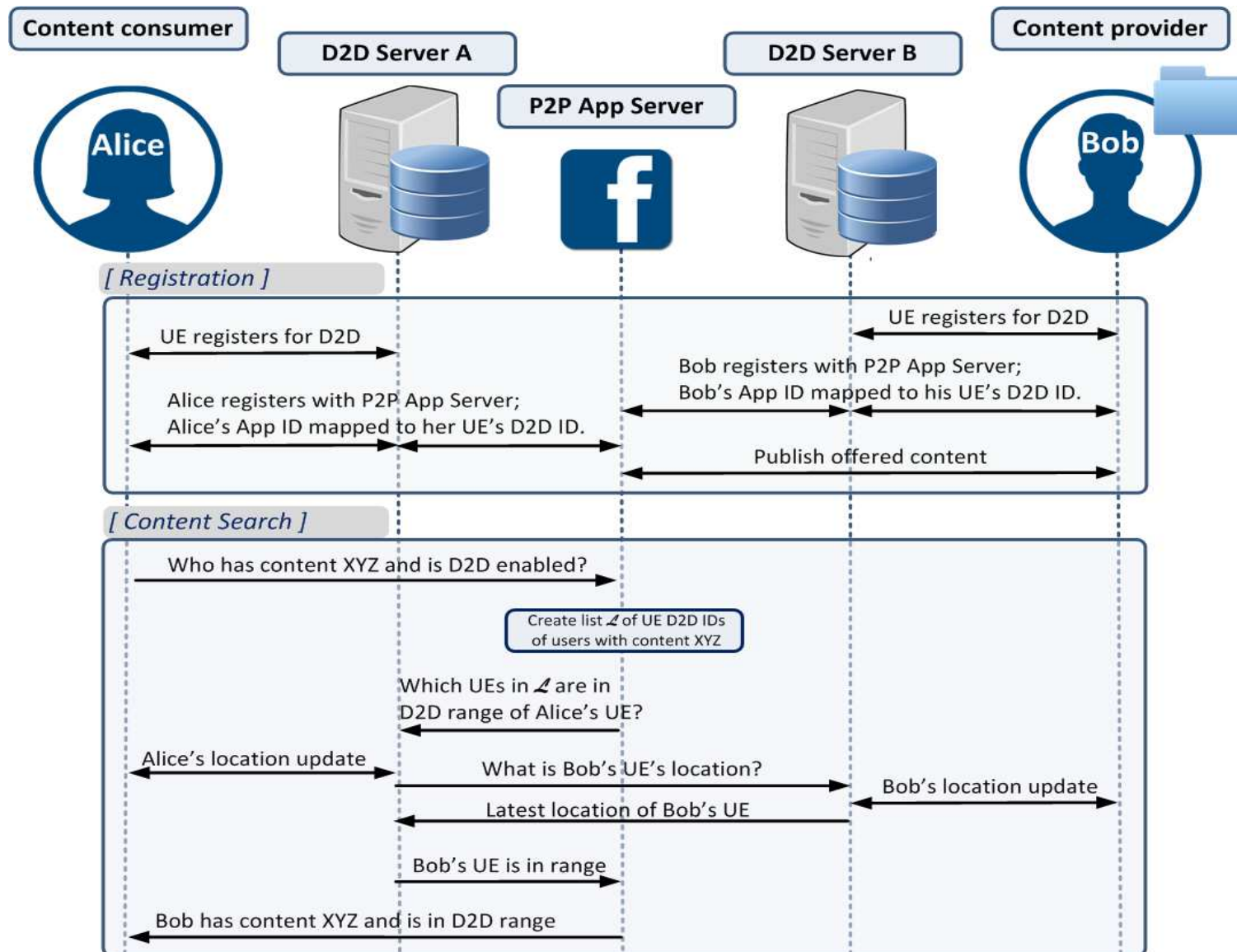
- Uniform network experience
- Establish context aware services.
- Fulfill needs for Quality of Experience

Example Use Cases for Device-to-Device communication

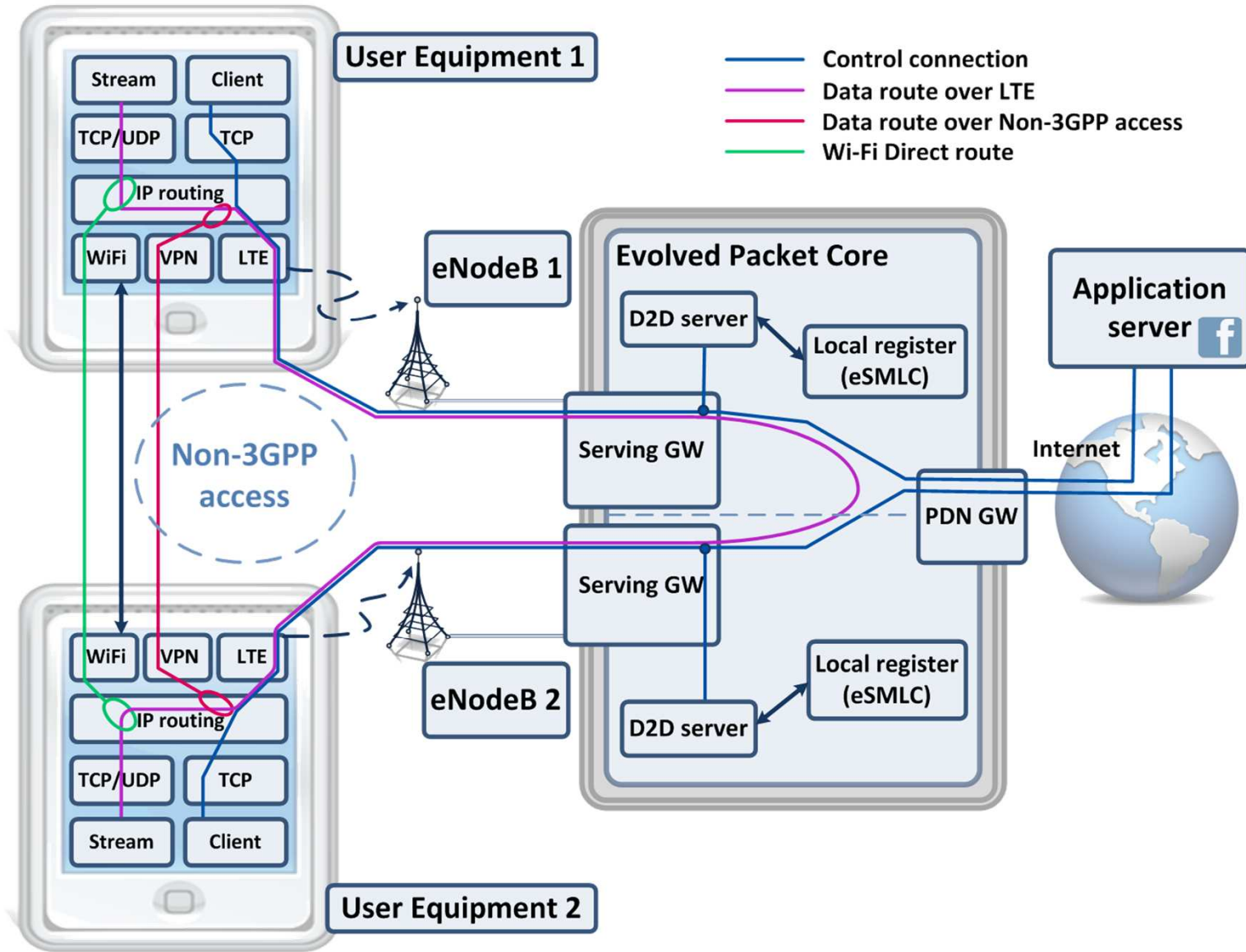
- Voice service
- Multimedia content sharing
- Group multicast
- Gaming
- Context-aware applications
- Safety and privacy applications



S. Andreev, A. Pyattaev, K. Johansson, O. Galinina, and Y.Koucheryavy,
 IEEE Communications Magazine, April, 2014.



S. Andreev, A. Pyattaev, K. Johansson, O. Galinina, and Y. Koucheryavy, IEEE Communications Magazine, April, 2014.



S. Andreev, A. Pyattaev, K. Johnsson, O. Galinina, and Y.Koucheryavy, IEEE Communications Magazine, April, 2014.