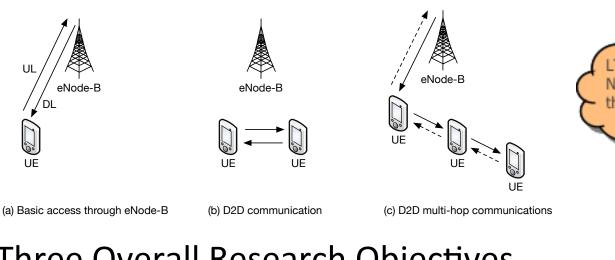
Indo French Workshop on D2D Communications for 5G Telecom Paris Tech 21st June, 2016

Introduction to CEFIPRA
Original Reference Model for D2D in LTE (4G)
D2D, IoT and 5G Standardisation
Research Topics
Time Plan and Logistics

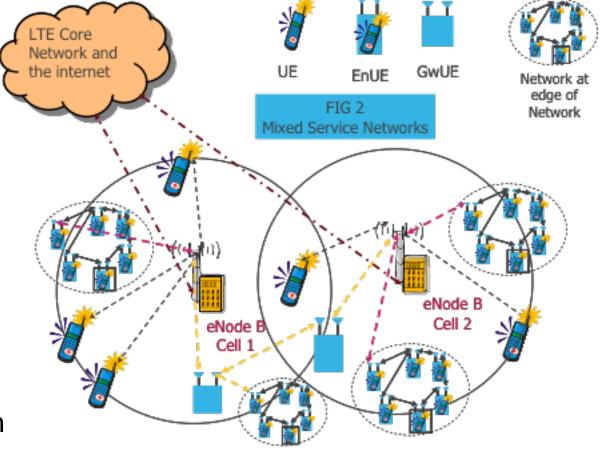
Introduction to CEFIPRA

- CEFIPRA (Centre Franco-Indien pour la Promotion de la Recherche Avancée) or IFCPAR (Indo-French Center for Promoting Advanced Research)
 - Usually known as CEFIPRA even in India
 - Head office based in New Delhi.
- Financed jointly by the French Ministry of Foreign Affairs (MAE) and Department of Science and Technology (DST) Government of India
- Efficient and light weight funding instrument
- More than 1000 PhD's sponsored since its foundation app 30 years ago
- Traditionally focused on promoting PhD's and Post-doctoral research in Mathematics, Natural Sciences and Astrophysics - between academic partners (to a very very large extent)
- CEFIPRA Finances
 - Fellowships for PhD candidates
 - Post Doctoral Candidates
 - Mainly mobility of confirmed researchers between India and France and for dissemination in conferences and standardization meetings
- "D2D Project " is one of the very first projects with participation from an industrial research organization

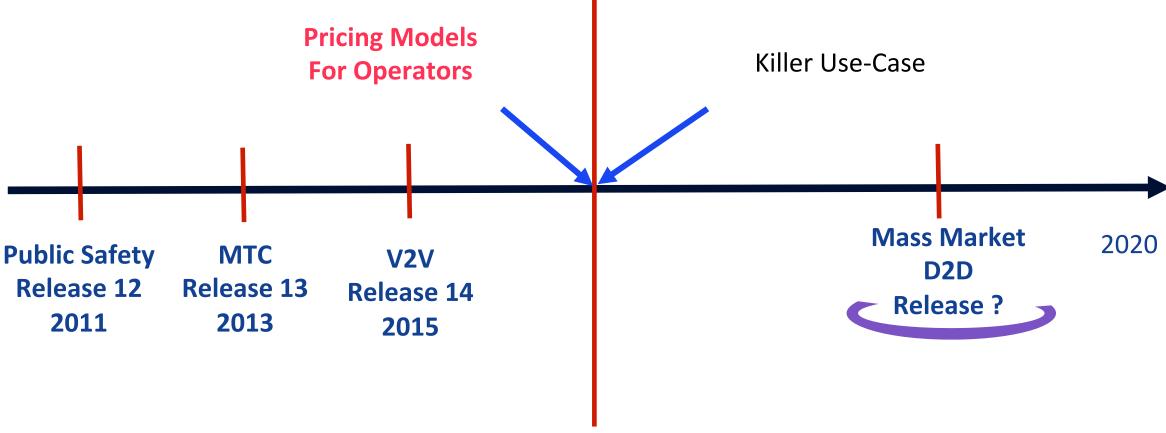
Original Proposal Reference Model for "D2D Research"



- Three Overall Research Objectives
 - Improved Spectral Efficiency e.g by reusing frequency for edge networks
 - Improved Energy Efficiency for UE's through peer to peer networking
 - Improved latency for content distribution through peer to peer networking



D2D-IoT-5G Applications-Standardization - I



Vertical Markets are driving the Standards & Technology



D2D-IoT-5G Applications-Standardization - Il Industry **Public** Safety Health and Wellness **5G** D₂D Cellular **Technology** Industrial IOT IOT **Smart Cities & Entertainment** Mass Market **Precision** D₂D Agriculture

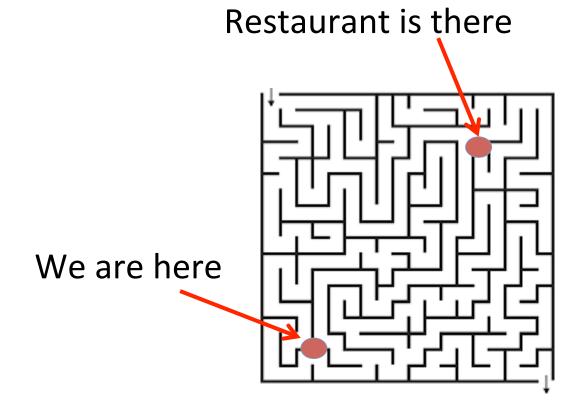


Agenda

- 9:00-9:45: Coffee
- 9:45-10:00: Vinod KUMAR (Nokia), Amira ALLOUM (Nokia), Marceau COUPECHOUX (TPT) Welcome
- 10:00-11:00: Tutorial: An overview of D2D in 3GPP LTE standard, Sofia MARTINEZ LOPEZ (Orange Labs)
- 11:00-11:30: Coffee
- 11:30-12:30: Plenary: Connectionless Access for Green Wireless Networks, Philippe JACQUET (Nokia)
- 12:30-02:00: Lunch
- 02:00-02:30: Resource Allocation Schemes for D2D Communication, Mohamad ASSAAD (CentraleSupélec)
- 02:30-03:00: Information-Theoretic Results on D2D Networks, Michèle WIGGER (TPT)
- 03:00-03:30: Stochastic Algorithms for D2D Communications, Ketan RAJAWAT (IITK)
- 03:30-04:00: Coffee
- 04:00-04:30: Opportunistic Link Activation and Routing Protocols for Multi-Hop D2D Communication, Chandra MURTHY (IISc)
- 04:30-05:00: D2D LTE and IoT, Cédric ADJIH (INRIA)
- 05:00-05:30: Graph Matching and D2D Communication, Rahul VAZE (TIFR Bombay)
- 05:30-05:45: An information theoretic perspective on D2D mode selection, Chandra MURTHY (IISc)

Logistics

WiFi Access



• Lunch

• Tickets are avalable for having lunch in Telecom ParisTech restaurant follow the map above or just follow me...