



Ministerial
Programme 2012

Welcome and introduction

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En digital agenda

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för Europa



Barcelona

Setting the scene

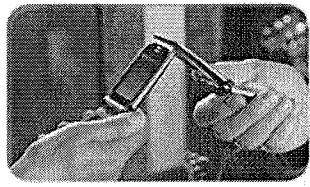
Barriers and principles for contactless mobile payments

Jorgen Gren
Deputy Head of Unit, DG INFSO
European Commission



Scenario/vision

Seamless citizen experience with interoperable mobile solutions



Touch to Share



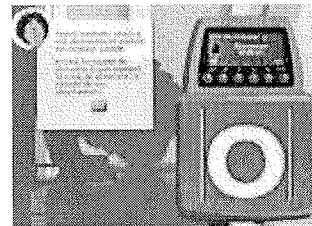
Touch to Discover



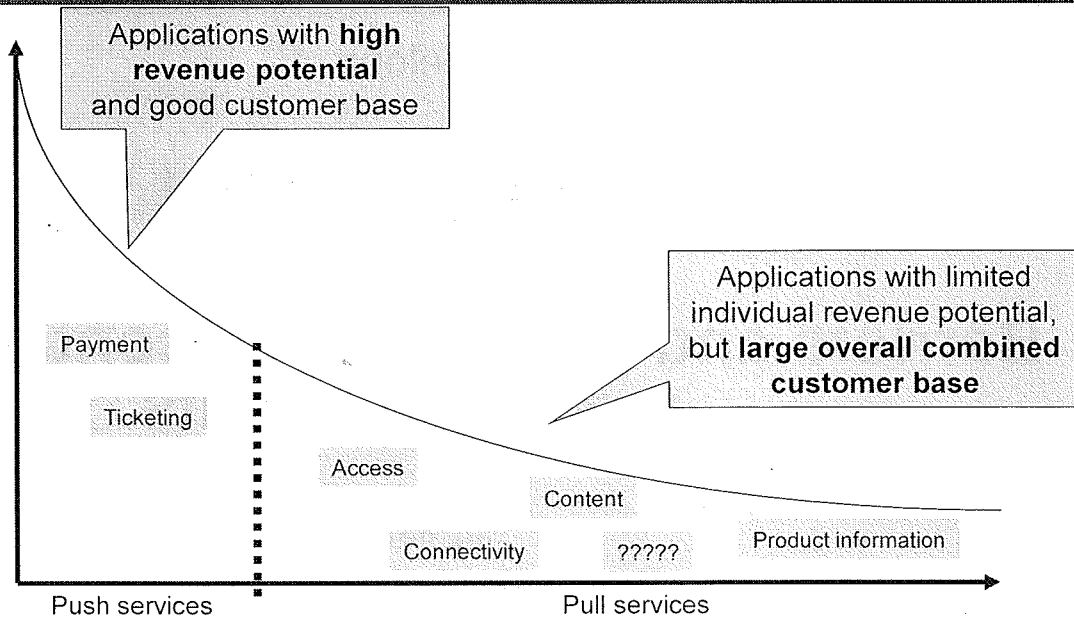
Touch to Pay



Touch to Ticket



Mobile solutions – long tail



- The pull services —the long tail — can *cumulatively* outweigh the push services
- **All services** need to be considered for mobile solutions roll-out



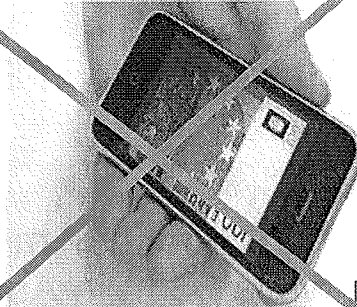
Barriers to proximity payment solutions

Fragmented markets
proprietary solutions
lack of interoperability

Low trust: security and data protection, liability for unauthorized transactions

Roll-out of infrastructure, how to achieve critical mass?

Market operators' "wait-and see" approach – what is the tipping point?



Where is the industry going?





Untapped potential

- Mobile operators interested in investing in NFC – 1 in 5 smartphones will be NFC enabled in 2014 (Green paper)
- In the US, value of NFC payments is expected to reach \$50 billion by 2016 (ABI, 2011)
- Over 5m SIM-based NFC devices sold in South Korea in 2011 (~10% of user base)

BUT:

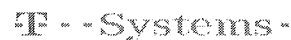
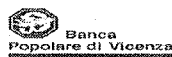
- **Europe lagging behind:** in 2010 only 7 m mobile payment users in Western Europe, while 63 m in Asia / Pacific
- Important global m-payments initiatives **outside of Europe:** Apple, Google, Visa, MasterCard...

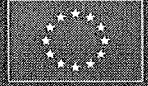


FP sponsored research – particularly for NFC development

StoLPan - Store Logistics and Payment with NFC:

- Budget 4.9m euros
- Deliverables: developed a JAVA based mobile NFC host application, back-office architecture, communication protocols
- Completed in 2008
- Partners:





Key principles for the future (embedded in GP)

- Quick development and massive deployment of infrastructure
- Smart co-operation and fair sharing of profits
- (Resilience and efficiency of m-payment systems
- Interoperability and open standards: to limit market fragmentation: to ensure convenient, cost-effective solutions – is more standardisation necessary, where?
- Appropriate level of security for the whole m-payment value chain resulting in high degree of consumer trust



Take home message

- Support for efforts of European industry to deploy mobile contactless payments
- But:
- Added value for digital single market
 - Open standards,
 - Interoperability
 - Competition issues respected



Thank you for your attention!

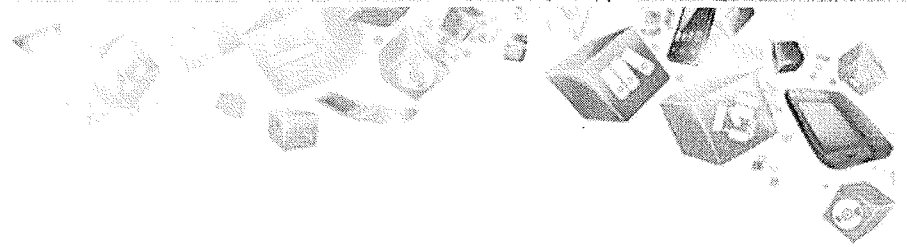


M-payments Green Paper - key policy questions

- Is more **standardisation** necessary? What role, if any, can CEN or ETSI play? (Q 21, 22)
- In which segment in the payment chain are there **interoperability gaps**? How can they be addressed? (Q 23, 24)
- How to address **governance structure** of standardisation and interoperability? What is the role for public authorities (Q 25, 26)
- Are m-payments **secure enough**? What approaches/technologies are most effective? Would legislation on payment security necessary? (Q 25 – 27).
- How to ensure protection of **personal data**? (Q 28).
- What are **benefits / drawbacks** of roll-out of m-payments for transport? Can transport pave a way for m-payment roll-out in other sectors? How to engage payment service providers?



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Socio-economic benefits of SIM-based NFC

Panelists:

Nav Bains, Business Lead Mobile NFC Services, GSMA

Michael Knott, Vice-President, Booz and Company

Daniel Gurolla, Vice-President, Orange

Moderator: Marina Solin, GSMA



GSMA Mobile NFC Programme

27 February 2012

Barcelona

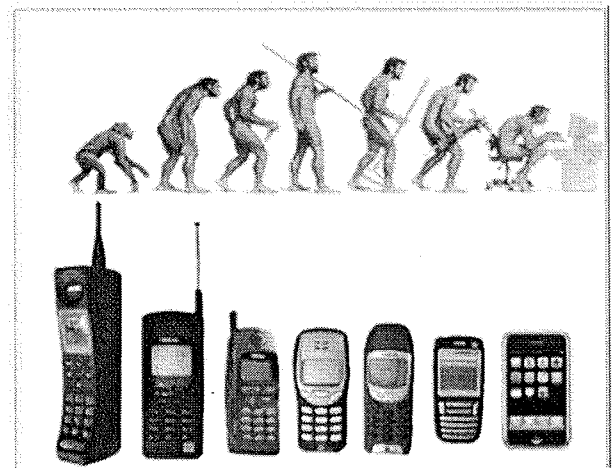
Mobile Trends

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Trends in the Mobile Phone evolution

- Processing power and sophistication of the mobile phone is growing

- Analogue voice only
- Digital voice and data
- High speed data
- Internet enabled
- Cameras
- Music
- Touch screen
- Application stores
- Mobile Wallets
- Spectrum of new services (NFC proximity payments, loyalty, access, transportation ticketing etc)
- Location based services (personalised advertising)
- What next ?

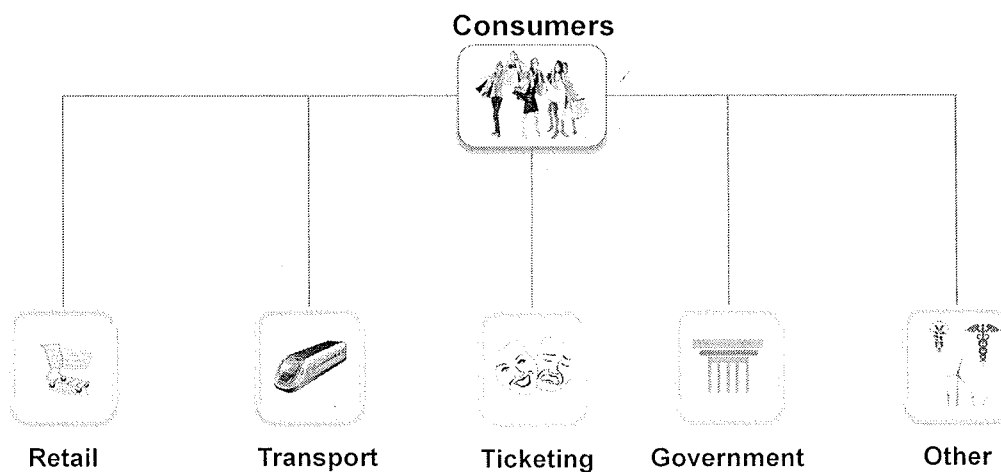


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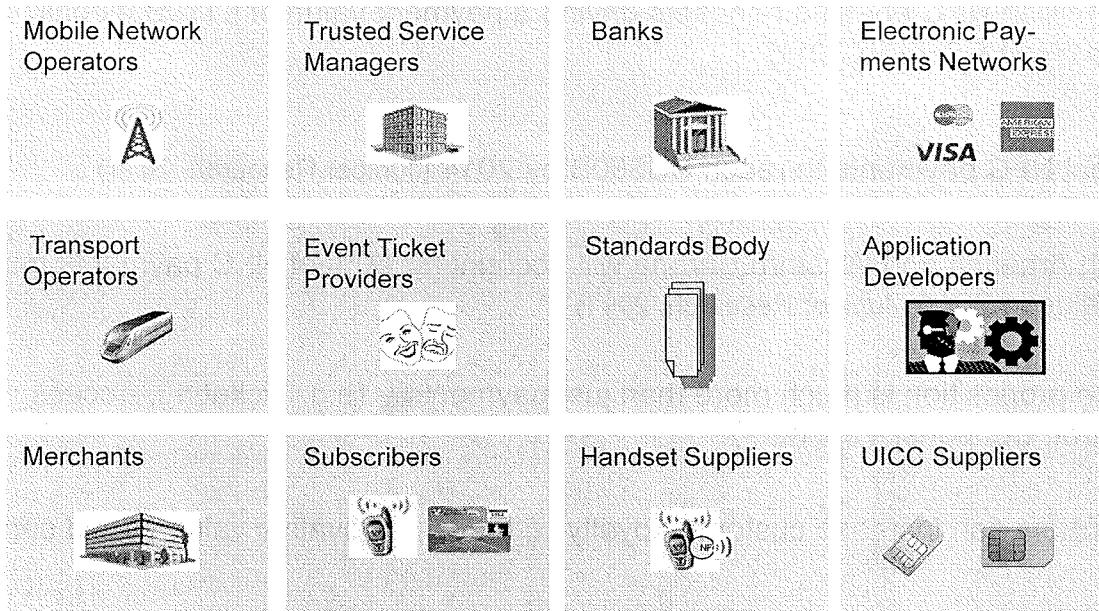
NFC – Business Opportunity

- 860 million NFC-enabled handsets driving a payment value of €110B globally by 2015 (Frost & Sullivan, 2011)
- Global NFC payments to reach US\$50B by 2014 (Juniper Research, 2011)
- North America and Western Europe will account for 50% of NFC payments market by value in 2014 (Juniper Research, 2011)
- Value proposition is much more than just payments – (e.g. Ticketing, Access Control, Coupons, Vouchers)
- Operators can increase customer loyalty with new, innovative value added services

Mobile NFC brings new services to the consumer



A complex ecosystem involving many players



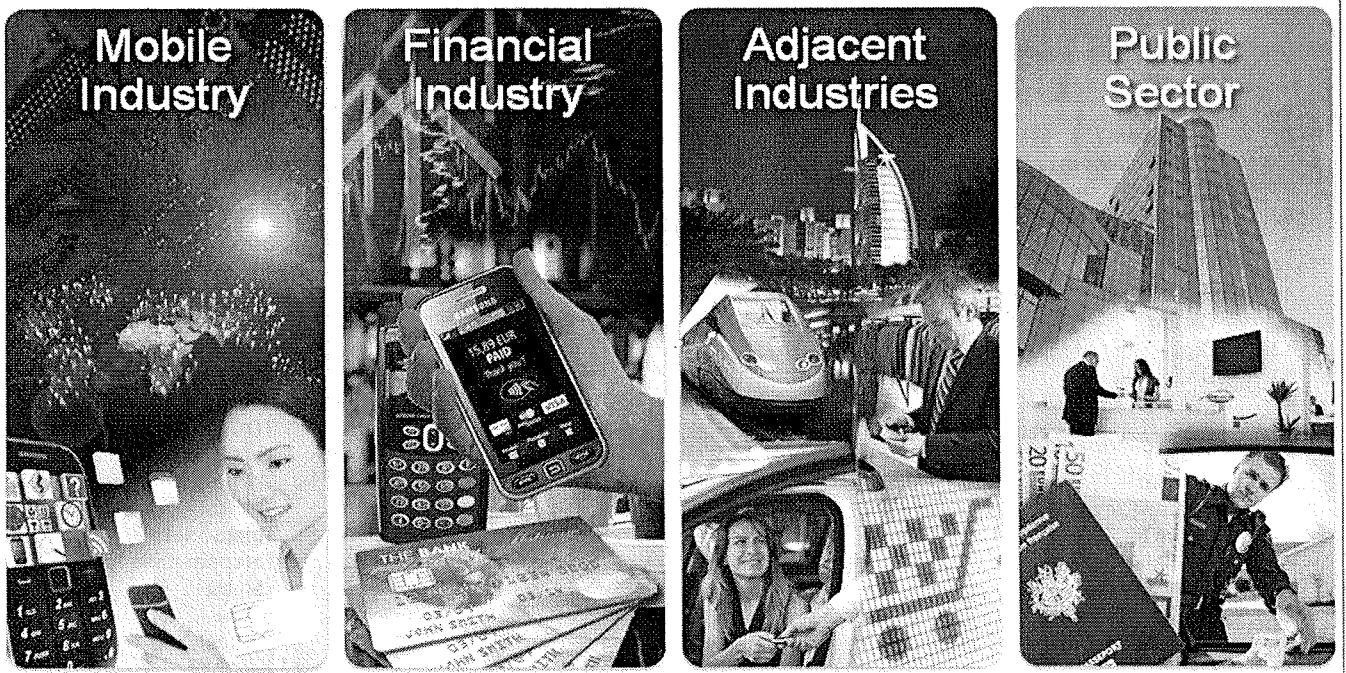
Objective GSMA's NFC Programme



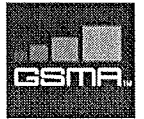
*“ To **stimulate** the successful **global** deployment of **interoperable and SIM-secured** NFC / contactless services and **ecosystems** which are available to **all**”*

- Working in 9 different markets around the world to help accelerate SIM-based NFC service launches
 - Australia, Belgium, Brazil, Canada, China, Western Europe, Japan/Korea, Nordics, Poland

Building the NFC Ecosystem

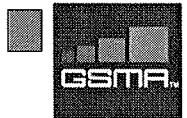


Differing approaches to NFC will fragment the market
NFC can only succeed with collaboration across the value chain

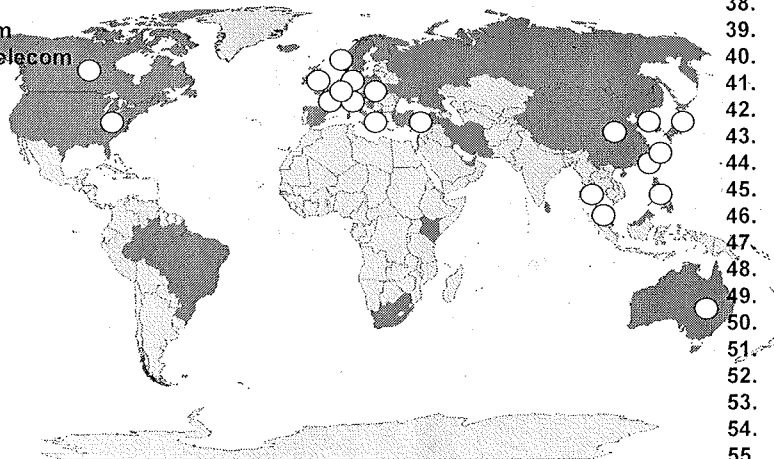


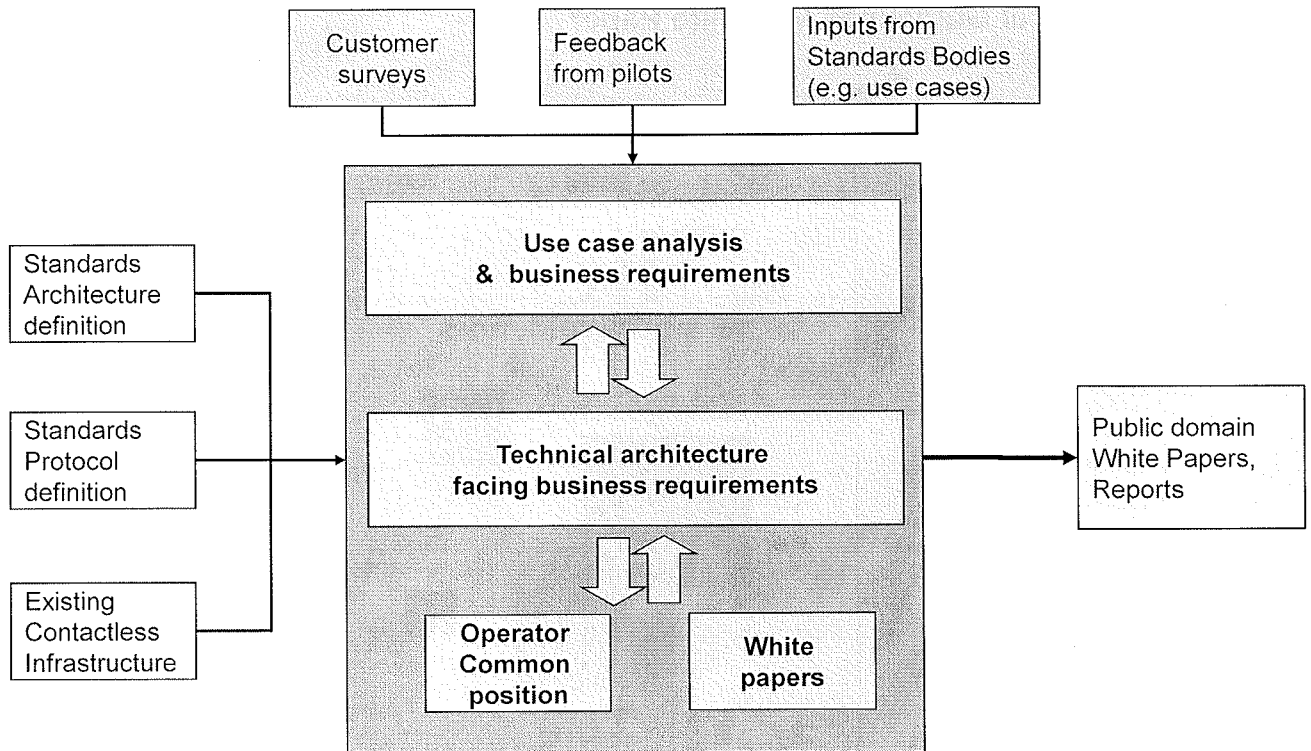
- GSMA has been working with a number of key players in the ecosystem for several years, including:
 - EMVCo
 - ETSI
 - European Commission
 - European Payment Council
 - Euro-Commerce
 - GlobalPlatform
 - IATA
 - NFC Forum
 - NRF

62 Operators Participating/supporting NFC Project Over 20 NFC Pilots around the world



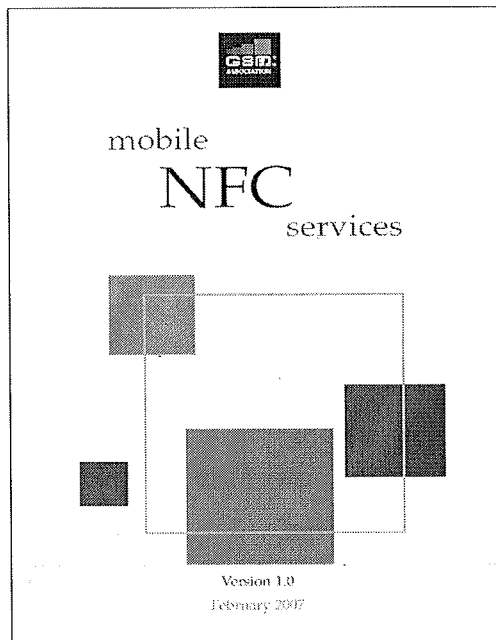
- | | |
|---|-------------------------|
| 1. AT&T (Phase 2 co-lead, Phase 3 Lead) | 32. MTS |
| 2. KT (Phase 1 Lead, Phase 2 co-lead) | 33. NTT DOCOMO |
| 3. Astelit | 34. Orange |
| 4. Azerfon | 35. Partner |
| 5. Belgacom | 36. Pelephone |
| 6. Brazil Telecom | 37. Rogers |
| 7. Celcom | 38. SFR |
| 8. China Unicom | 39. SINGTEL |
| 9. Chunghwa Telecom | 40. SINGTEL OPTUS |
| 10. CMCC | 41. SK Telecom |
| 11. CSL | 42. SMART |
| 12. Dialog | 43. Softbank Mobile |
| 13. Digi | 44. Starhub |
| 14. DST | 45. Swisscom |
| 15. Econet | 46. Taiwan Mobile |
| 16. EITC | 47. TDC |
| 17. Elisa | 48. Telecom New Zealand |
| 18. Etisalat | 49. Telefonica-O2 |
| 19. FarEasTone | 50. Telenor |
| 20. GlobeTel | 51. TeliaSonera |
| 21. IMC Island | 52. Telecom Italia |
| 22. Kall | 53. Telstra |
| 23. KDDI | 54. Telus |
| 24. KPN | 55. Turkcell |
| 25. Maxis | 56. T-Mobile |
| 26. MCI | 57. Verizon |
| 27. Meteor | 58. Vimpelcom |
| 28. MobiCom | 59. Vodafone |
| 29. Mobilkom Austria | 60. Wataniya |
| 30. Mobitel d.d. | 61. Wind |
| 31. MTN | 62. Zain |





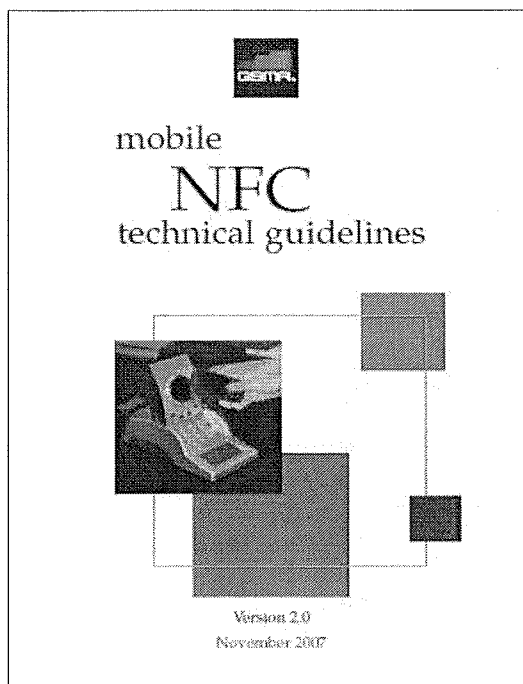
GSMA Publications

- **Business Opportunity Analysis Public White Paper**
 - <http://www.gsma.com/news-information-and-resources/>





■ NFC Technical Guidelines V2 White Paper

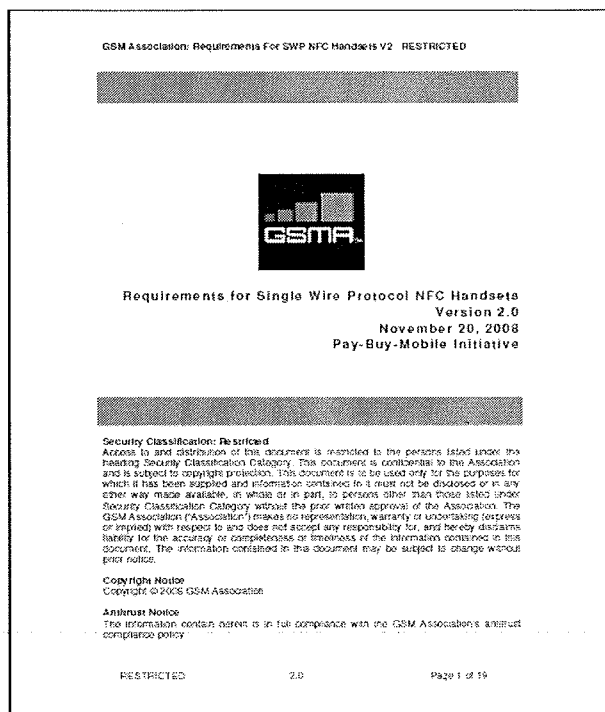


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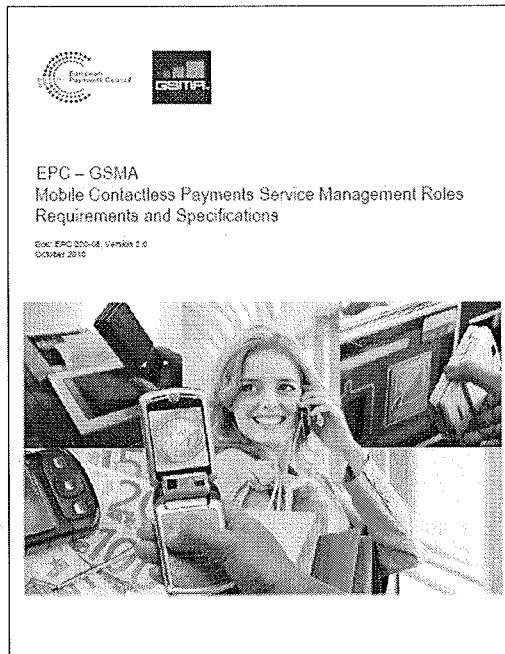
■ GSMA Requirements for SWP NFC Handsets V4



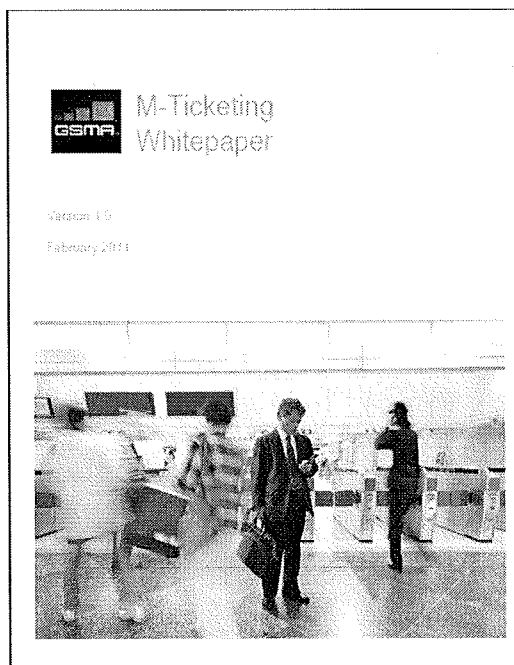
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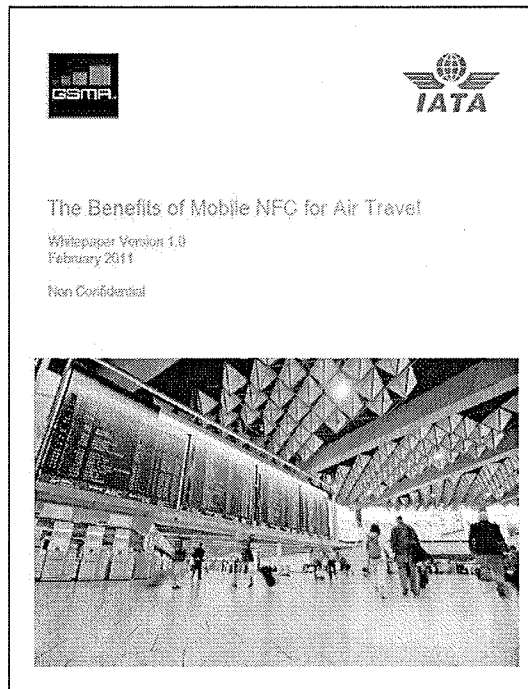
- EPC/GSMA TSM document V2



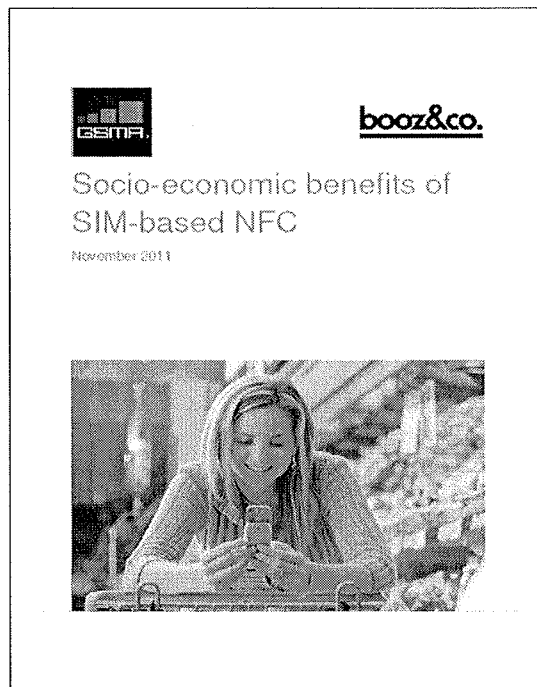
- M-Ticketing White Paper



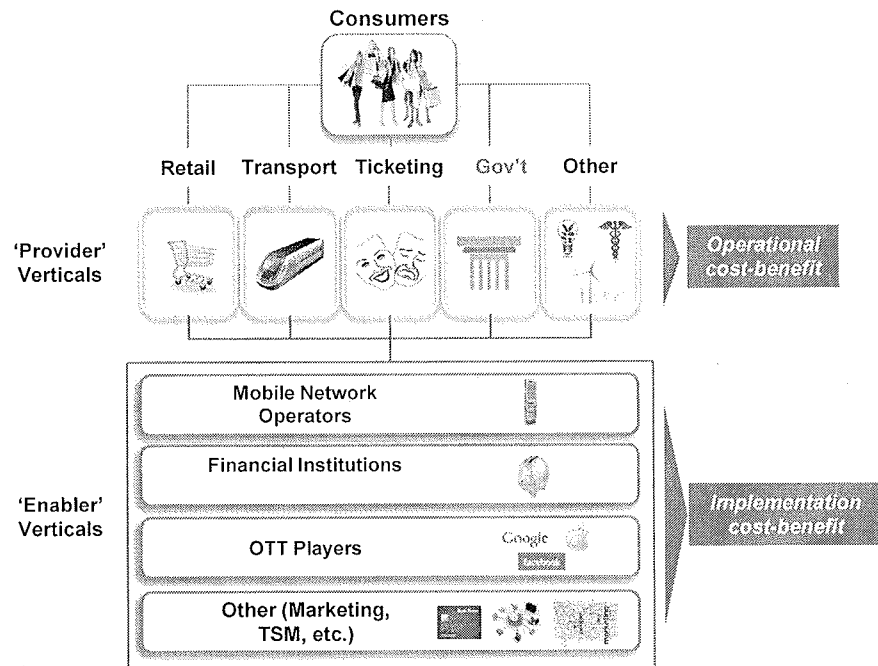
- GSMA-IATA White Paper v1 published February 2011



- Socio-Economic Benefits of SIM based NFC Services



Analytical approach covers multiple stakeholders and sectors



Source: Booz & Company analysis
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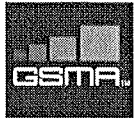
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Two market scenarios underpin key study messages and outputs



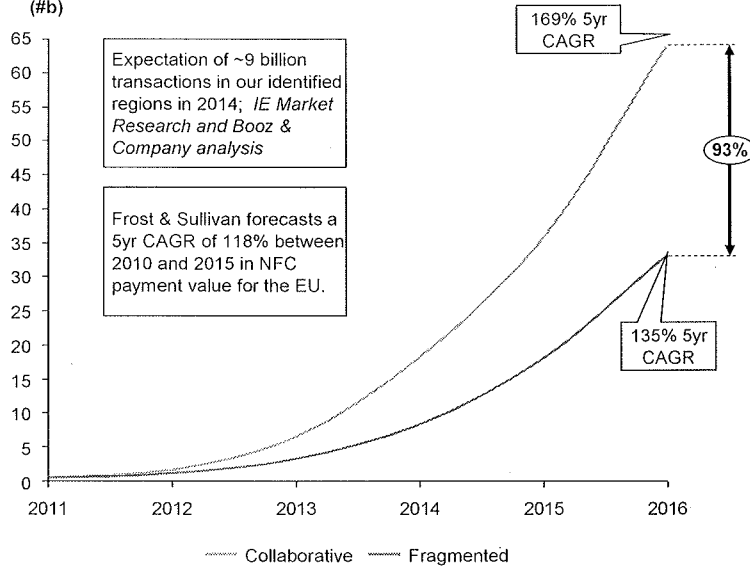
- Scenario 1: Collaboration and Standardisation
- Scenario 2: Fragmented and Proprietary

Standardisation drives greater aggregate transaction volume



Total NFC Transaction Volume (across all sectors and markets)

Number of NFC Transactions
(#b)

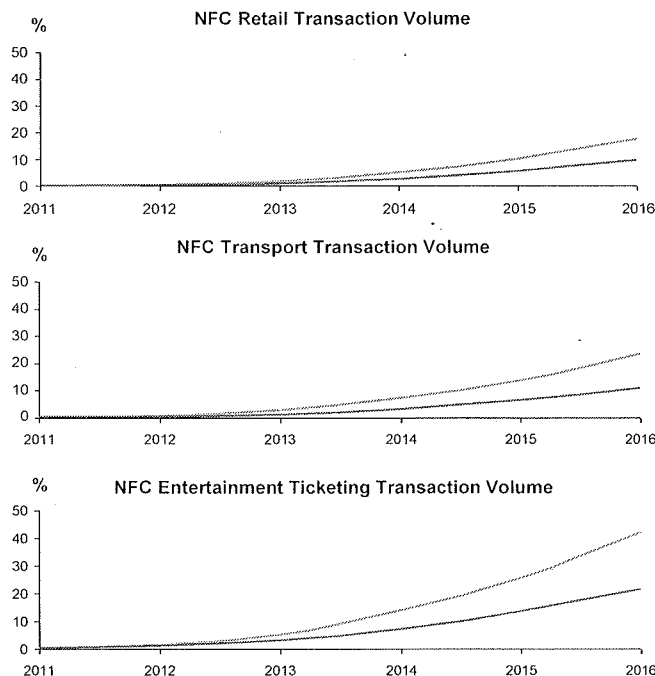


- Standardisation reduces cost and infrastructure barriers, creating a more conducive enabling environment for national as well as local market players

Source: Juniper, ComScore, Frost & Sullivan, IE Market Research, Booz & Company analysis

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Increased transaction flows underpin these impact areas



Source: Juniper, ComScore, Frost & Sullivan, IE Market Research, Booz & Company analysis

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Collaborative — Fragmented