

BNP PARIBAS SECURITIES SERVICES

BLOCKCHAIN EN ACTIONS : USAGES ET LIMITES



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June 2016



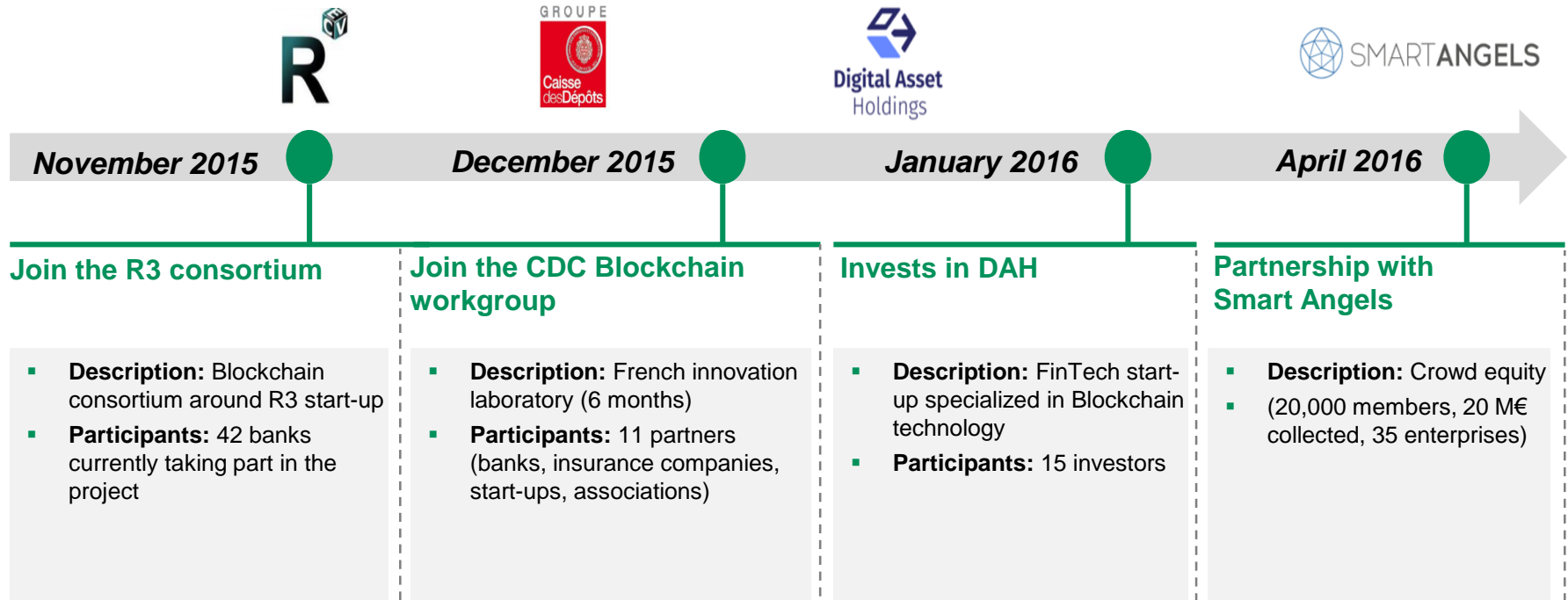
BNP PARIBAS

The bank for a changing world

Expected Benefits & challenges

- Blockchain technology has the potential to address a number of issues in the financial services industry
 - Potential to remove intermediaries from the chain
 - Processing speed
 - Increased transparency on transactions
 - Cost
 - Data quality
 - Reliability
- While the technology is very promising and initiatives are popping up everywhere, challenges will need to be overcome to deliver on these promises, such as:
 - Technology still in infancy (stability of protocols, scalability, reliability, interoperability, public versus private, permissioned versus permissionless, consensus, integration with legacy systems...).
 - Identity framework
 - Regulatory landscape
 - Legal implications

BNP Paribas' increased blockchain investment



June 2015

SME Post trade infrastructure

7 MAJOR FINANCIAL INSTITUTIONS JOIN FORCES TO DEVELOP BLOCKCHAIN INFRASTRUCTURE FOR SME POST-TRADE

Paris – 21 June 2016 – BNP Paribas Securities Services, Caisse des Dépôts, Euroclear, Euronext, S2iEM and Société Générale, in collaboration with Paris EUROPLACE, today announced that they have signed a Memorandum of Understanding to explore together the development of a post-trade blockchain infrastructure for SMEs in Europe.

Real benefits as an « integrated platform »



Market place for “private stocks”

- SmartAngels partnership ...
 - Delivering an **operating** environment for “blockchain” in the **securities services** area
 - Answering a need from corporates & investors & equity crowdfunding & crowdlending
 - A new market for “Securities Services”
 - Fit to “blockchain” constraints (volumes / latency / integrated model from Issuers to Investors) and benefits (easy to deploy, distributed information ...)
 - Fit to existing & upcoming regulatory environment

- ... delivering more
 - Additional partners ...
 - Secondary market (auction based / peer to peer OTC)
 - International expansion
 - Additional instruments (bonds)



What's in SmartAngels / BNPP project

Create Issuer details / Delete Issuer details
 Create Investor details / Delete Investor details
 Asset Creation, Modification and Cancelation
 Capital increase – primary issuance
 Functional information (Value date, entity which has created the event on the blockchain)
 Indication of Buy or Sell investor request
 Settlement (from Issuer to Investor)
 Investor wallet
 Issuer registrar
 Reportings
 Get account which has an asset
 Get Asset of an account
 Get Transaction detail for a specific transaction ID
 Get transaction which occurred on an account
 Get transaction which occurred on an asset
 Extract all asset
 Get investor which have Buy or Sell transaction

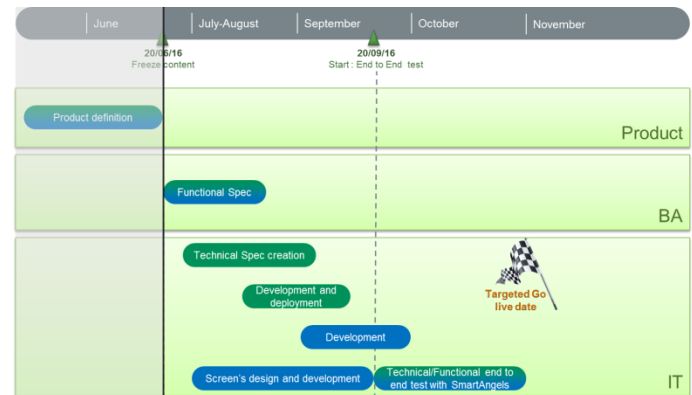
New service

General meetings &
 Financial distribution (annual report)
 Cash clearing (dividend payment)
 Secondary market

New assets

Bonds

Non exclusive
 White labelled option
 Self servicing model
 Operating blockchain network &
 applications



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