



# Building Blocks for the e-Infrastructure Commons

Steven Newhouse  
(EMBL-EBI)

# History

- Strategic plan for scientific cloud computing (2011)
- Initial flagship applications from CERN, EMBL & ESA
- Adoption of a hybrid cloud model
  - In-house resources
  - Commercial cloud service providers
  - Public funded e-infrastructures
- Tackling European-scale issues
  - Technical, financial, procurement, legal and governance

# The European cloud public-private partnership



## Strategic Plan

- Establish multi-tenant, multi-provider cloud infrastructure
- Identify and adopt policies for trust, security and privacy
- Create governance structure
- Define funding schemes



To support the computing capacity needs for the ATLAS experiment

EMBL



Setting up a new service to simplify analysis of large genomes, for a deeper insight into evolution and biodiversity



To create an Earth Observation platform, focusing on earthquake and volcano research



To improve the speed and quality of research for finding surrogate biomarkers based on brain images

Additional Users:



## Suppliers

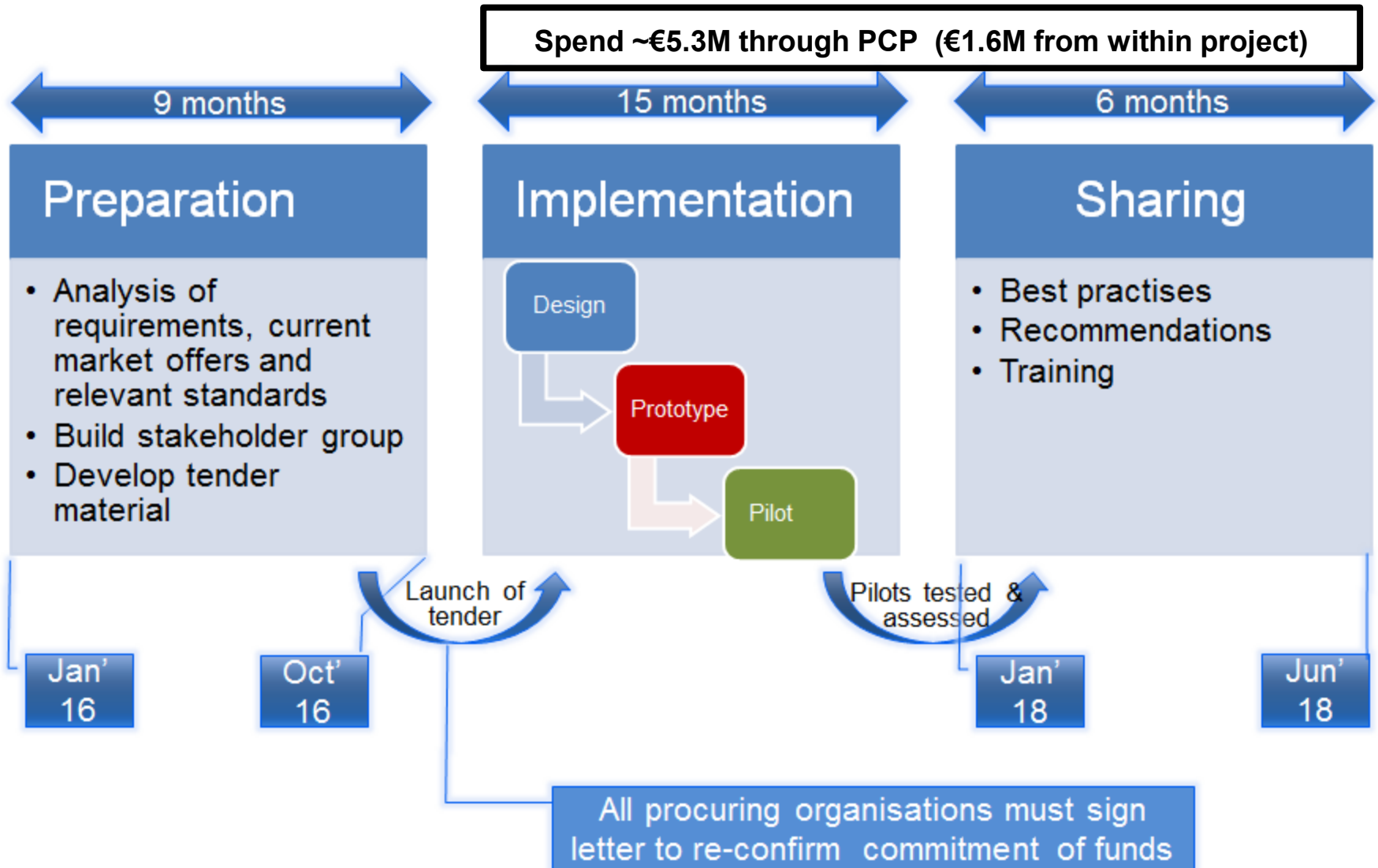


## Adopters



June 2015

# HNSciCloud Project



# 7th Helix Nebula General Assembly

- Cloud computing services to support innovation and open science
  - EMBL, Heidelberg on 19-21 January 2016: [https://indico.cern.ch/e/HNI\\_GA7](https://indico.cern.ch/e/HNI_GA7)
- European Open Science Cloud
  - Open sessions 20 January 2016 & smaller group meetings the following day
  - Converge on a cloud computing model for open science
- Key stakeholders
  - Research infrastructures and their user communities
  - Researchers in the long-tail of science
  - Researchers from the public and private sectors
  - 3rd Party value chains
  - Service providers
  - Funding agencies

# Integrated Cloud Services

- e-infrastructure Commons
  - Commercial cloud providers able to serve researchers over GEANT
  - Rationalised and integrated services
- European Open Science Cloud
  - Build on e-Infrastructure Commons
  - Commercial cloud providers for different SLAs
  - Services that enable Open Science

