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Planets: Preservation Planning Components and Strategies

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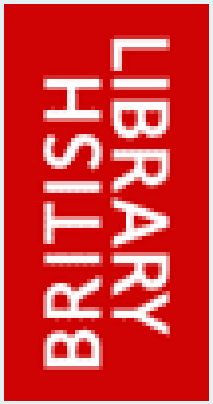
Outline of presentation

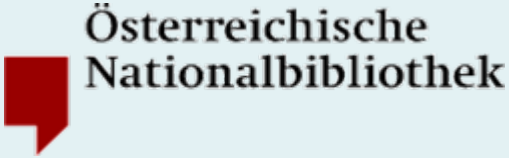
- Brief introduction to Planets
- Key components of Planets architecture
- General digital preservation scenario using Planets tools and services
- Planets components in detail
  - progress to date
  - foreseen developments
- Conclusions

Planets overview

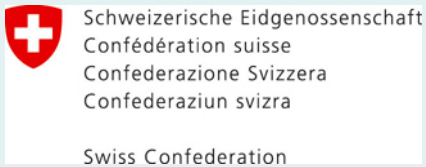
- A 4-year research and technology development project co-funded by the European Union to address core digital preservation challenges
- Started June 2006 with €15m budget
- Coordinated by the British Library
- Builds on strong digital archiving and preservation programmes
- Focuses on the needs of libraries and archives
- Involves 16 partners
  - National libraries and archives
  - Leading technology companies
  - Research universities

Planets partners



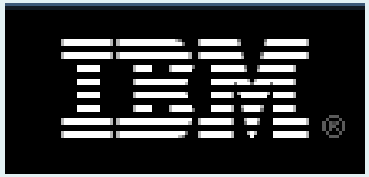


- The British Library
- National Library, Netherlands
- Austrian National Library
- State and University Library, Denmark
- Royal Library, Denmark



- National Archives, UK
- Swiss Federal Archives
- National Archives, Netherlands

Planets partners



- Tessella Plc
- IBM Netherlands
- Microsoft Research
- Austrian Research Centers GmbH

- Hatii at University of Glasgow
- University of Freiburg
- Technical University of Vienna
- University of Cologne

planets

The Planets team

All Staff Meeting, Feb 2007

Objectives

- **Increase Europe's ability to ensure long-term access to its cultural and scientific heritage**
  - Improve decision-making about long term preservation
  - Control the costs of preservation actions through increased automation, scaleable infrastructure
  - Ensure wide adoption across the user community and establish market place for preservation services and tools
- **Build practical solutions**
  - Integrate existing expertise, designs and tools
  - Deliver tools and services that can be used in an operational environment
  - A click-and-install Planets application

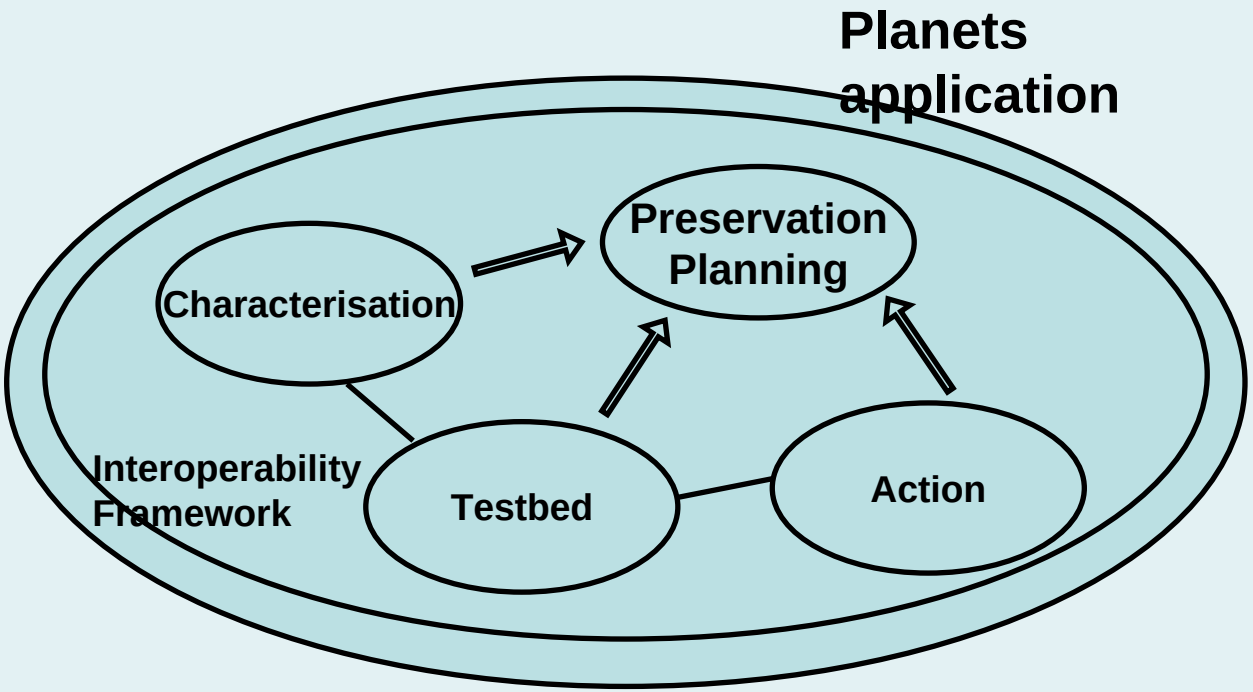
Motivations

- For national libraries & archives
  - Have been collecting digital documents and records since 1982
  - Have the legal responsibility and the legislative framework to safeguard digital information
    - preservation and access over the long term is their **primary mission**
  - Realise that meeting the challenge of preserving access goes beyond the capabilities of any single institution
  - Collaboration with research & ICT is a must
  - Need pragmatic solutions here and now

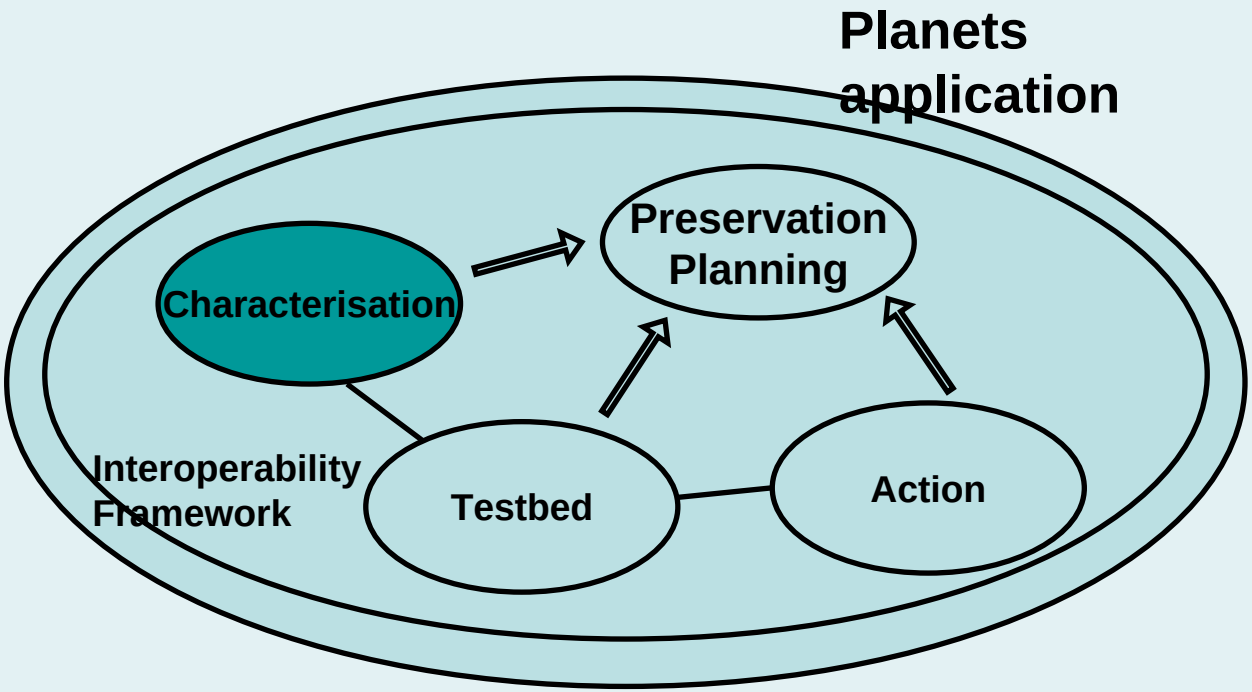
Motivations

- For researchers
  - Complex cross-disciplinary issues
  - Fundamental frameworks still unclear
  - Huge potential impact for a broad range of society
- For technology companies and tool developers
  - Opportunity to introduce and test innovative tools, services and products
  - Opportunity to increase competitiveness
  - The market is emerging – personal and corporate
  - Few vendors have the capability to address this need on their own

The Planets Preservation components



Planets Application : Characterisation

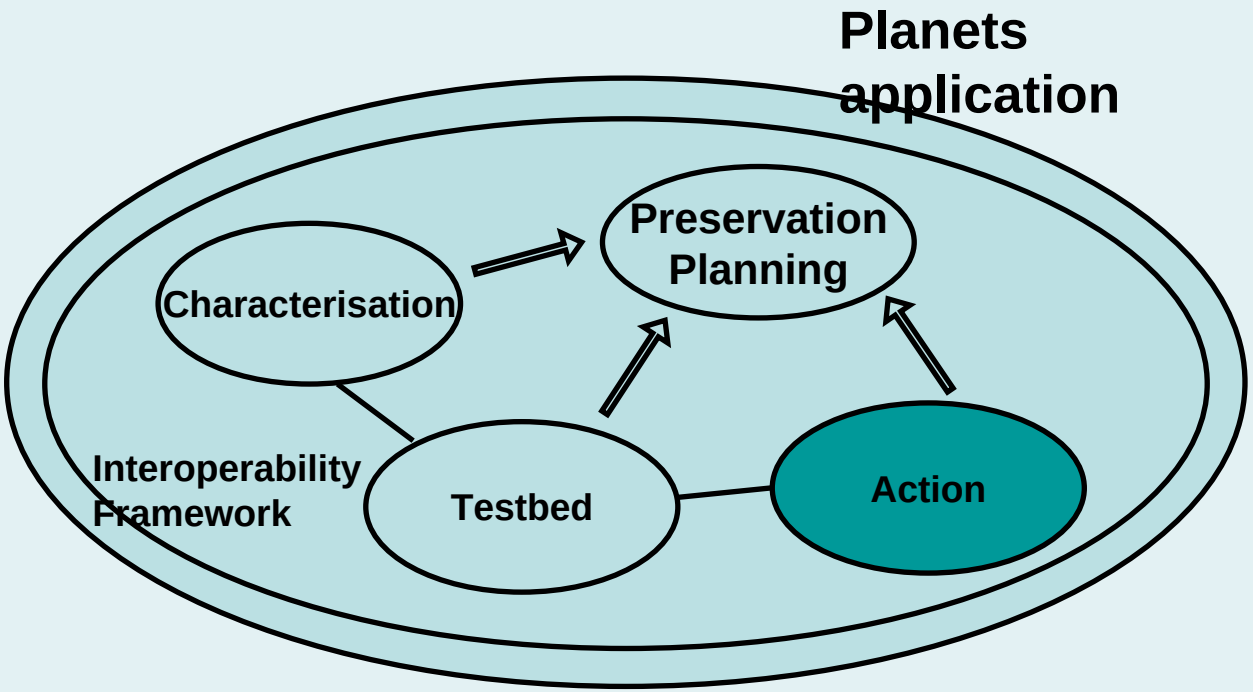


Characterisation

- Tools for automatic analysis of digital objects' technical and intellectual characteristics
- An XML-based generalized model of information contained within files:
  - a language which describes a file format (XCEL - eXtensible Characterisation Extraction Language)
  - a language which expresses the content of a file (XCDL –eXtensible Characterisation *Definition* Language)
- Supporting registry of characterisation information

- First definition of languages ready
- Automated Characterisation Framework based on PRONOM/DROID to be integrated
- Final specifications of the characterisation description and extraction languages, as well as the tools, available end 2008

Planets application: Preservation Action

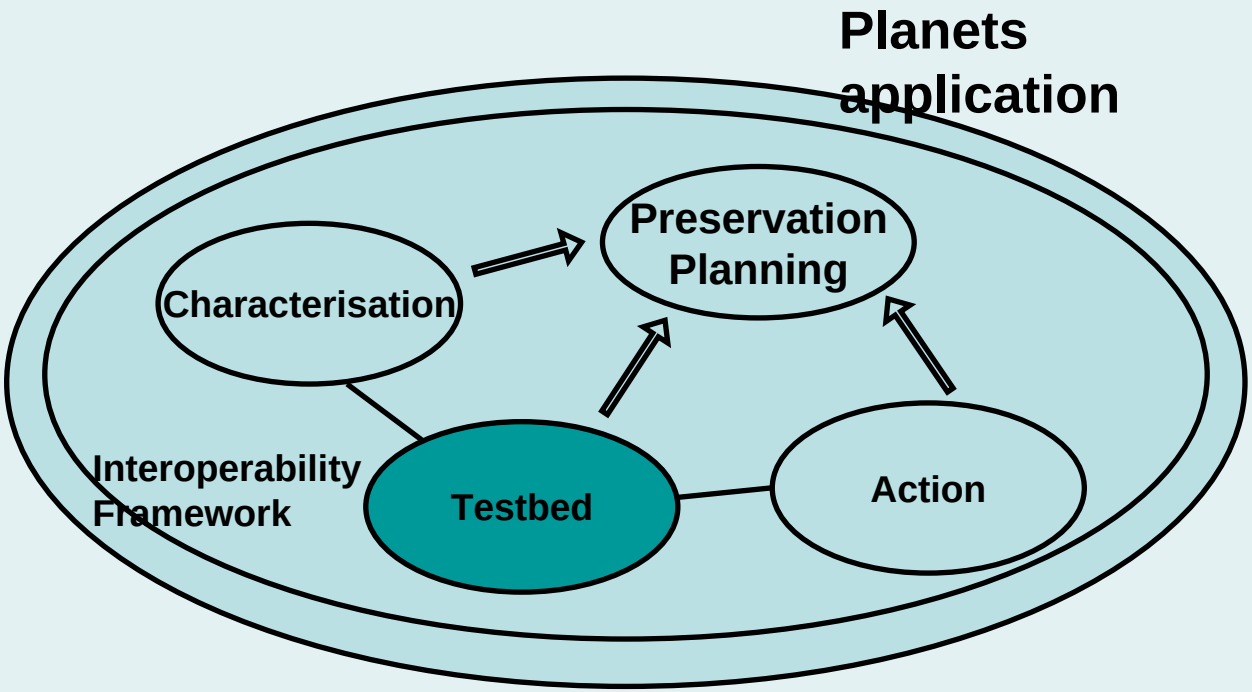


Preservation Action

- Methodology for describing preservation action tools
- Supporting registry of tools for objects (migration) and tools for environments (emulation)
- Gap analysis
- Development of new migration and emulation tools

- Description language and gap analysis initiated
- First release of requirements for registry, and of procedures glossary
- Overview of existing emulators and testing of approach
- End 2008:
  - Develop new Preservation Action tools
  - Implementation of file migration tools as web services
  - Preservation action tool registries

Planets application: Testbed

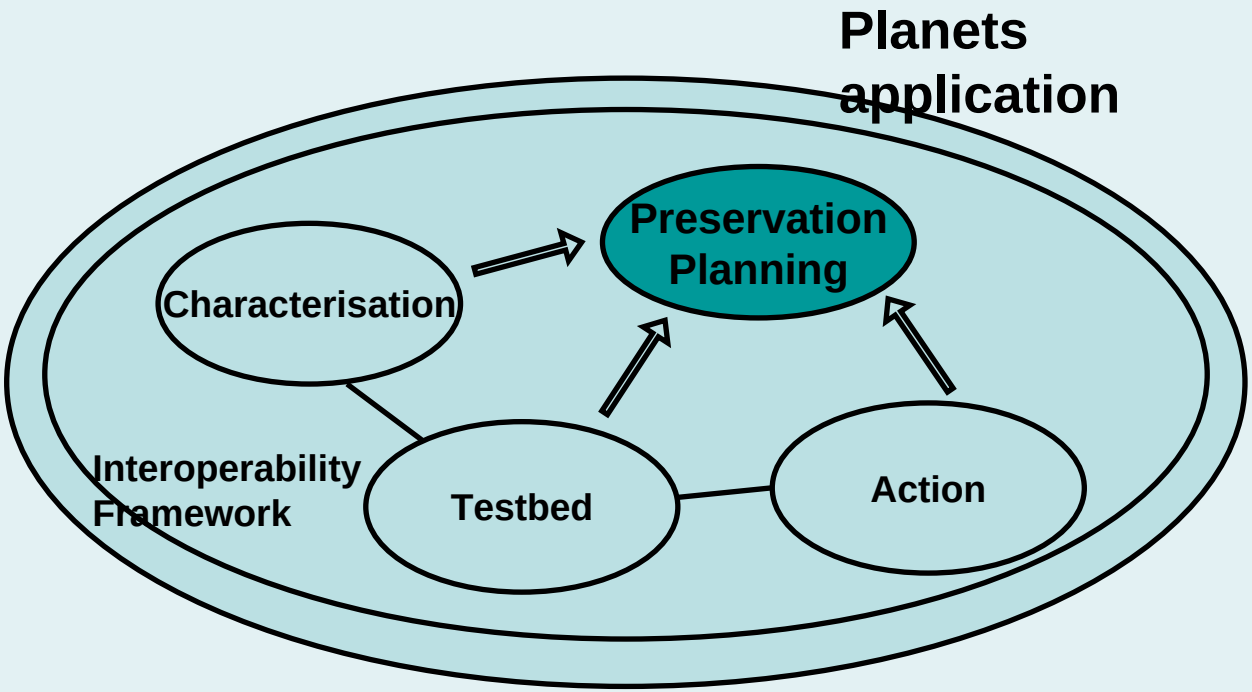


Testbed

- A controlled environment offering to organisations inside and outside Planets
  - experimentation services (evaluation of individual tools)
  - preservation plan assessment services
  - corpora
- First prototype available for sub-project evaluation September 2007

- First internal release February 2008
- Opening to external institutions end 2008

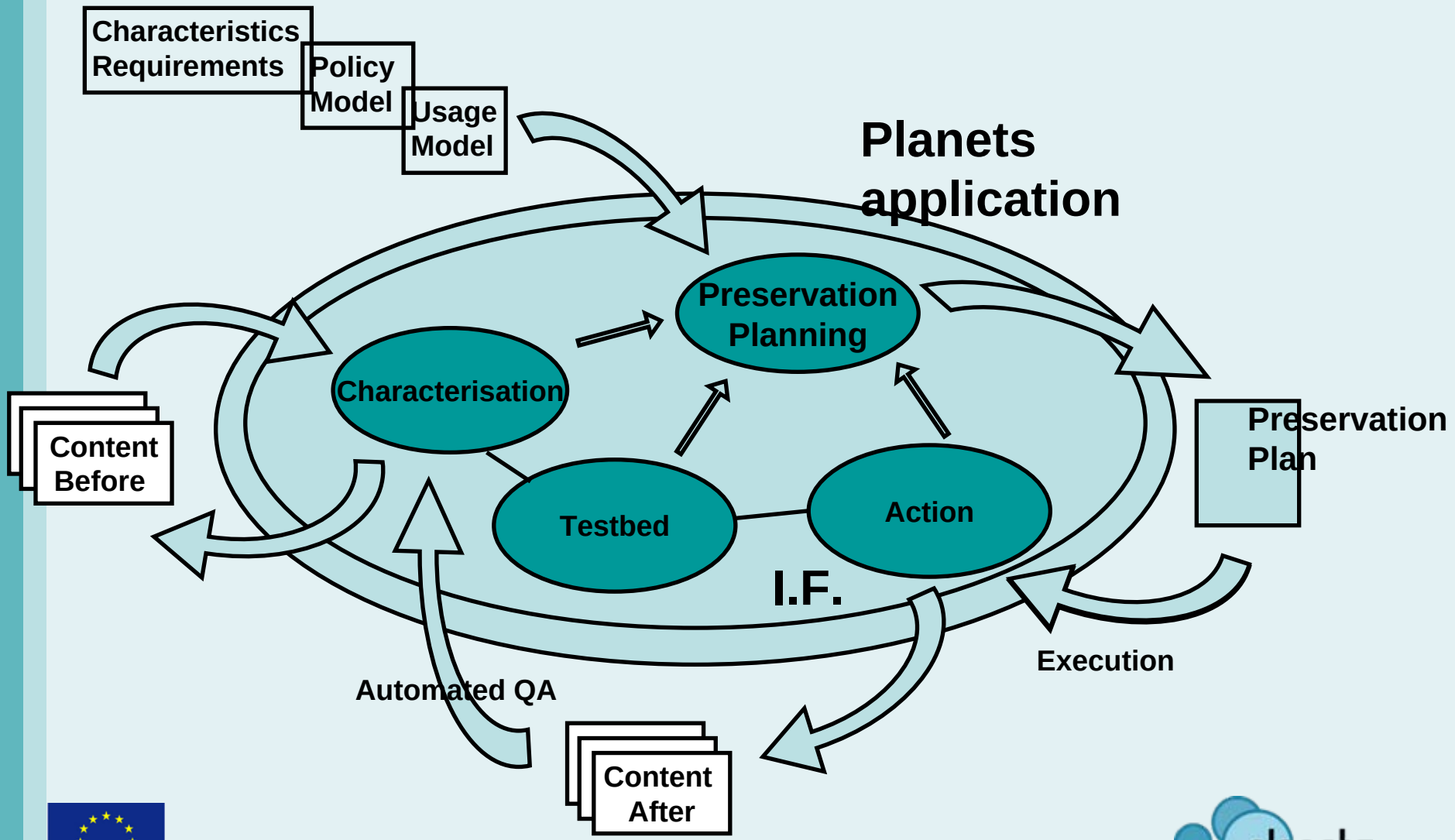
Planets application: Preservation Planning



Preservation Planning

- Tools for formulating and selecting preservation plans
- Take into account also institutional factors external to the digital object
  - Policy models
  - Collection/usage models
  - Institutional requirements on characteristics: PLATO
- Preservation planning tools will include decision support and risk assessment modules
- Preservation planning services will integrate an automated collection profiling service, a technology watch service, and an advice service

Planets application: A whole preservation cycle



Digital preservation: still a craft

- Digital preservation practice is still emerging
  - Substantial conceptual work
  - Ad hoc project approaches using locally selected tools
- There is no systematic analysis of preservation strategies or tools and services
  - Result: poor and inconsistent decision making

Conclusions – Planets approach

- Planets methods, tools, and services will help organisations diagnose and treat problems with their digital objects
- High levels of automation and scalable components will reduce costs and improve quality
- Empirical data with systematic evaluation, benchmarking, assessment will enable improved decision making
- From craft to automated process

Find out more:

http://www.planets-project.eu