Internet del Futuro
Contexto, situación actual y desarrollos futuros

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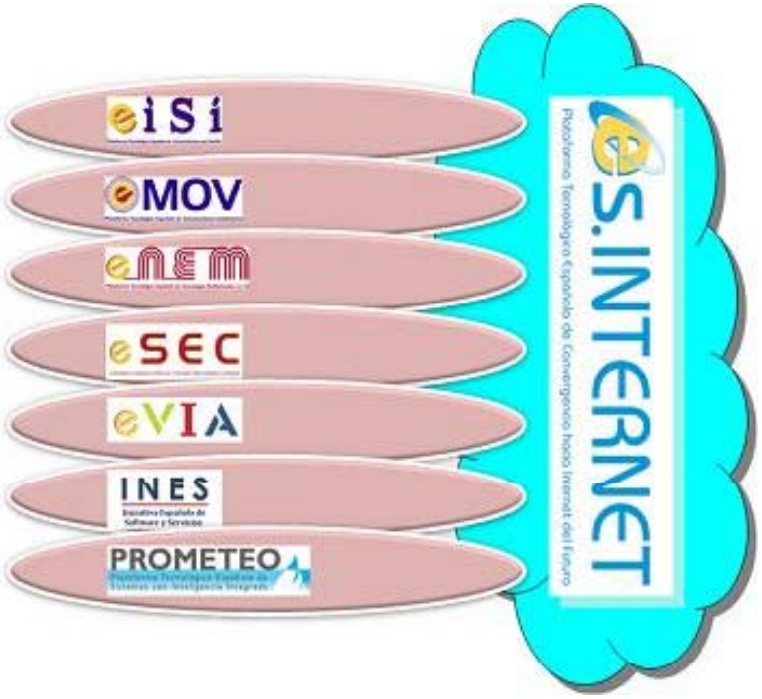
Las plataformas tecnológicas

- Las Plataformas Tecnológicas son redes de cooperación científico-tecnológicas en cuyo seno se agrupan entidades de muy distinta naturaleza, pero principalmente Empresas (grandes y PYMEs) y Organismos de Investigación (Centros Tecnológicos, Universidades y OPIs), interesadas en un sector concreto.
- Están lideradas por la industria y tienen dos objetivos principales:
  - Definir una Agenda Estratégica de Investigación dónde se incluyan las prioridades de I+D+i del subsector concreto de actuación.
  - Movilizar la masa crítica de investigación, desarrollo y esfuerzo innovador necesarios para dar un empuje al subsector español de actividad tanto a nivel nacional como europeo mediante el fomento de la cooperación y la generación de proyectos.

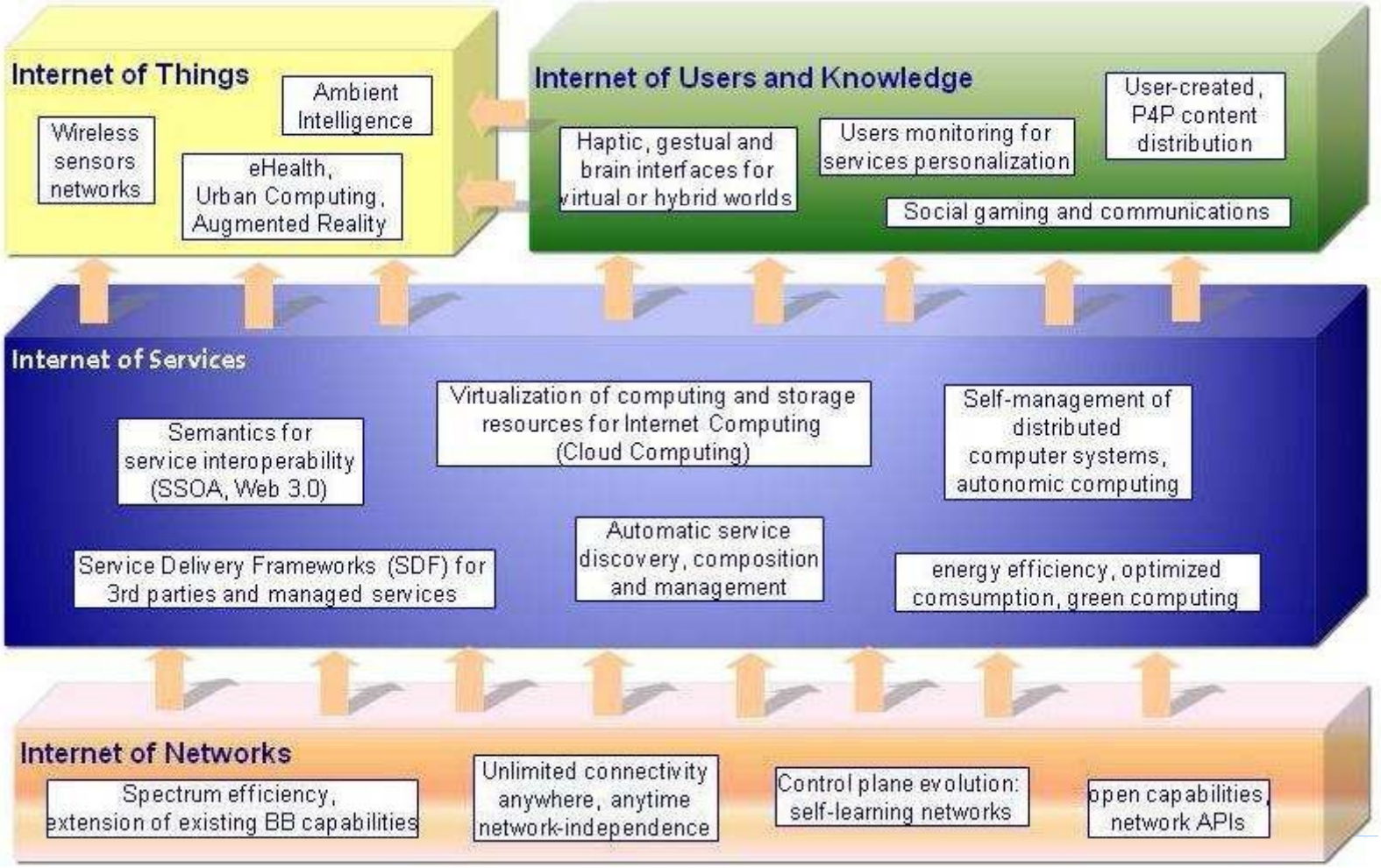
es.INTERNET

- es.INTERNET es la Plataforma Tecnológica Española de Convergencia hacia Internet del Futuro. Ante el interés creciente de las plataformas TIC existentes (eNEM, eMOV, eISI, eSEC, eVIA, INES, PROMETEO) en torno al área Internet del Futuro, se ha considerado necesaria la creación de una nueva plataforma convergente hacia Internet del Futuro que aúne y coordine estos intereses comunes a todas las plataformas.



Future Internet Vectors

Elements of the FI



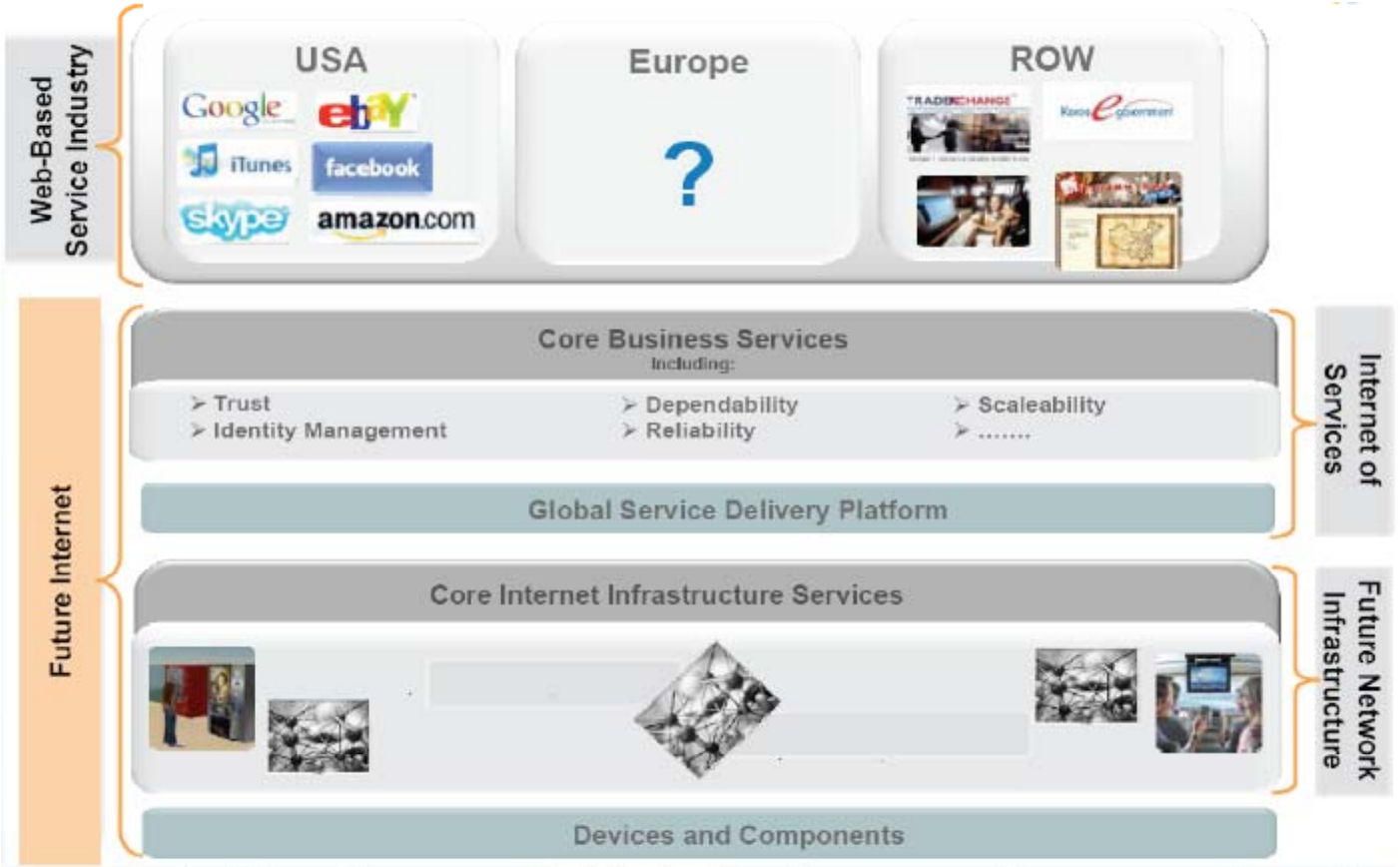
The strategy of experimental research

- Together with the concept of Future Internet, it has appeared the need of experimentation network for Europe and beyond Europe.
  - Any technological development affecting Future of Internet may have multifaceted and even unexpected consequences, at any technological, social or economic level. Therefore, new proposals for Internet architectures, protocols and services should not be limited to theoretical work, but also include early experimentation and testing in large-scale environments.
- Besides the currently available means (e.g., GEANT system for Europe), all actions are oriented towards a structure of experimental testbeds, as FIRE, PANLAB, ONELAB, etc…, managed by European entities.
  - These labs will allow to make tests with new protocols and services, as well as to generate solutions for new network architectures.
  - It is convenient to grant the greatest possible relevance to the participation of RTD Future Internet infrastructures in these shared use projects, with the sponsoring of the European Commission, coordinated with initiatives in USA, GENI/FIND, and other countries.
- These infrastructures must be prepared to test the advanced concept of Future Internet, and to validate new developments, concepts and services.
  - As the CERN exists for research on advance physics, it is required a similar infrastructure regarding to the Future Internet, where all researchers could test there advances in an adapted and adaptable environment to the new paradigms.

Future Internet - Requirements

- Be worthy of our society's trust
  - Even for managing and operating critical infrastructures
- Provide a bridge between physical and virtual worlds
  - Via instrumented and managed sensorized physical environment
- Support pervasive computing
  - From wireless devices to supercomputers
  - From wireless channels to all optical light-paths
- Enable further innovations in S&E research
  - Seamless access to networked instruments, supercomputers, storage, etc.
- Create a social world in which we would want to live

¿Un Objetivo para Europa/España?



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