

## A Brief Overview

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### A Socioeconomic Problem



- ◆ A core component of the European Union is a common market with a single information space that works with two dozens national languages and many regional languages. This ambitious endeavour is an unprecedented social experiment.
- ◆ If it works, the multicultural union of nations will prosper and serve as a model for the peaceful and egalitarian cooperation of people in other parts of the world. If it fails, Europe w

parts of the world. If it fails, Europe will be forced to choose between sacrificing cultural identities and economic defeat.



### Major Challenges



- Preserving the European cultural and linguistic diversity in the united information and knowledge society
- ◆ Securing at affordable costs the free flow of information and thought across language boundaries in the resulting single information space
- ◆ Providing each language community with the most advanced technologies for communication, information and knowledge management so that maintaining their mother tongue does not turn into a disadvantage

### Starting Point



- Where are we today?
  - Research has made considerable progress in recent years.
  - Successful projects have been funded by the EU and national programs.
  - But: the pace of progress is not fast enough to meet the three challenges within the next 10-20 years.
- Can progress be accelerated?
  - Yes. But only if the relevant stakeholders such as research communities, LT industry, user industries, language communities, funding programs and policy makers team up for a dedicated major push.
- We need an alliance of stakeholders dedicated to a large concerted effort.

### One more Question



• Q: How do we get such an alliance formed?

A: The remainder of the talk will present our proposals.



As researchers, how can we help to create the Alliance?



### a strong community

with ties into other R&D communities
with a network into industry and public administration
with visions and plans

visibility and credibility

powerful support from many sectors

massive additional resources

### Examples from other Fields



- ◆ **ARTEMIS** the European Technology Platform for Advanced Research and Technology for Embedded Intelligence and Systems
- ◆ **AAL** The Ambient Assisted Living Joint Programme
- ◆ EPoSS The European Technology Platform on Smart Systems Integration
- ♦ NEM The European Technology Platform on Networked and Electronic Media
- ♦ NESSI The European Technology Platform Networked European Software and Services Initiative

### Multilingual Europe Technology Alliance



META is dedicated to foster the technological foundations of the European multilingual information society to:

- enable communication and collaboration among people without language boundaries,
- secure users of any language equal access to the information and knowledge society, and
- push forward functionalities of networked information technology.



### ... a Network of Excellence with three major objectives

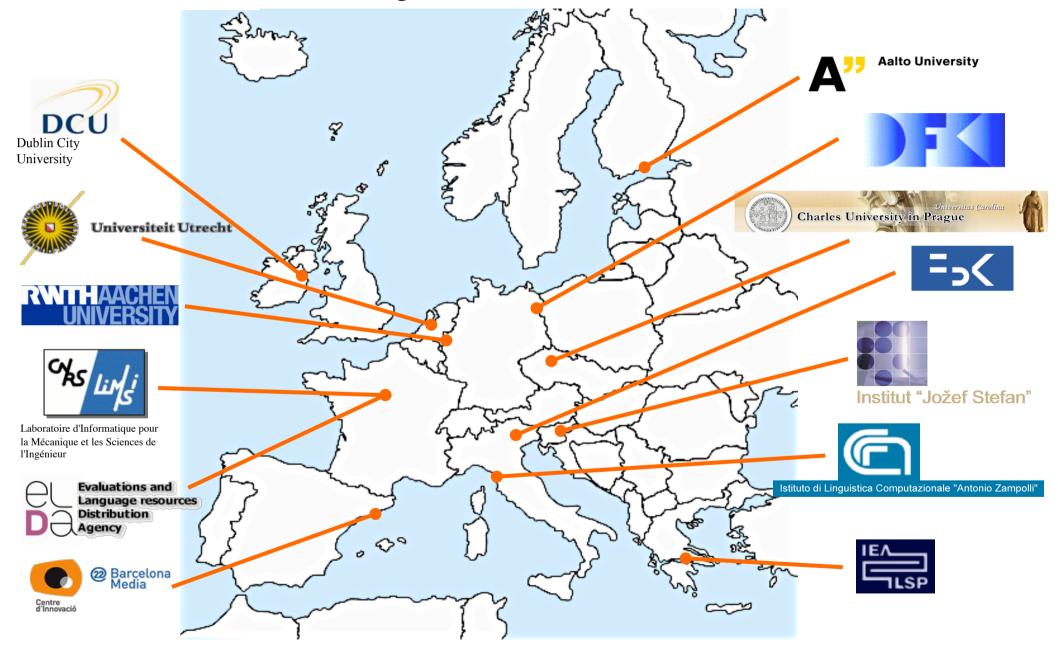
- Prepare the grounds for a large scale concerted effort by building a Strategic Alliance of national and international research programmes, corporate users and commercial technology providers and language communities.
- ◆ Strengthen the European research community through networking of research and by creating new schemes and structures for sharing resources and efforts.
- Build bridges by approaching open problems in collaboration with other research fields such as machine learning, social computing, cognitive systems, knowledge technologies and multimedia content.

### *Initial Funding: T4ME*



- ◆ First META-NET project **T4ME** NET
  - Funded under FP 7
  - Area: Language-based interaction
  - Total cost: 7.62 M EURO (EU contribution: 6 M EURU)
  - Execution: From 2010-02-01 to 2013-01-31
  - Duration: 36 months
- ◆ Three other META-NET projects are in the making
- Cooperation with many more projects has been established

# META | Founding Members





The META-NET objectives translate into three lines of action:

Building a community with a shared vision and strategic research agenda

Building META SHARE
Open Resource Exchange

Building bridges to neighbouring technology fields

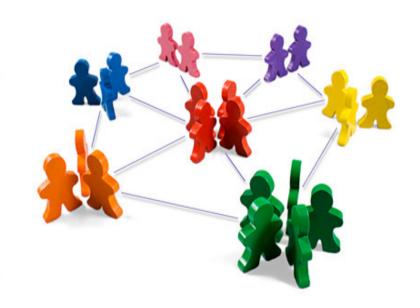
# Building a community with a shared vision and strategic research agenda



◆ **Goal:** Mobilize researchers, enablers, providers, (potential) users of technologies, R&D programmes for cooperation in **META** 

#### Actions:

- **Survey** the field
- Create a **shared vision** that feeds into a **Strategic Research Agenda**
- **Build a multiplayer community** via external liaisons, promotion, etc.
- **Spread knowledge** in training events



# Building a community with a shared vision and strategic research agenda



- A META Survey will investigate to what degree the languages of Europe are supported by applications, technologies, resouces and what their current status is the digital world is. (23+ concise Language Reports)
- **Vision Groups** will bring together researchers, developers, integrators and (actual or potential, corporate or professional) users of LT-based products, services and applications.
- A Technology Council will prepare a vision paper "European Multilingual Information Society 2020", a comprehensive Roadmap including individual roadmaps for key socio-economic sectors, light-tower application visions.
- Finally, a **Strategic Research Agenda** (SRA) will be presented by the Council.

### Planned Vision Groups



- 1. Translation and localisation (technical doc consumer info., UI localisation, official bulletins, services, ...)
  - target stakeholders: large users of translation services, translation companies, localization industry
- 2. Media and information services (audiovisual sector, news, digital libraries, portals, search engines, ...)
  - target stakeholders: media industries, web and search engine providers, archives
- 3. Interactive systems (mobile assistance, dialogue transl., call centres, ...)
  - target stakeholders: mobile software and service providers, telecom industry, call centres



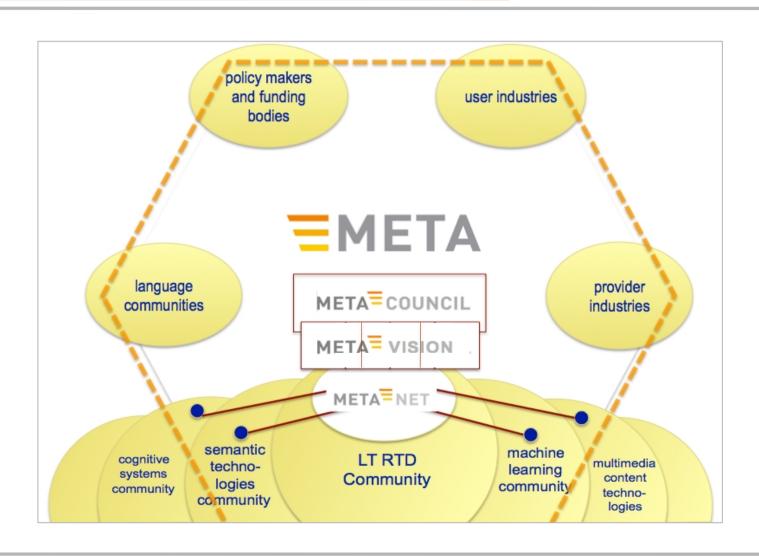




- Work in Vision Groups
- Provide input via a web-based discussion forum, will be on the META-WEB site
- Contribute to language reports
- ◆ Participate in the **Annual Conference**, etc. (the first one planned for Nov. 2010)

# Building a community with a shared vision and strategic research agenda









- ◆ Data have become a key factor in LT research and development indicators:
  - size and importance of LREC
  - corpora list
  - citation ranks of publications on resources
- ◆ Language research and language technology belong to "Data Intensive Science"
- ◆ As in other sciences, expensive data become valuable through sharing
- ♦ HOWEVER: the long demanded and well-contemplated instruments for managing and sharing are *still* missing





### **META-SHARE** is an

- open,
- integrated,
- secured,
- and interoperable
- language data and tools exchange infrastructure for the HLT (Human Language Technologies) domain and other applicative domains (e.g., digital libraries, cognitive systems, robotics, etc)

#### Building bridges to neighbouring technology fields

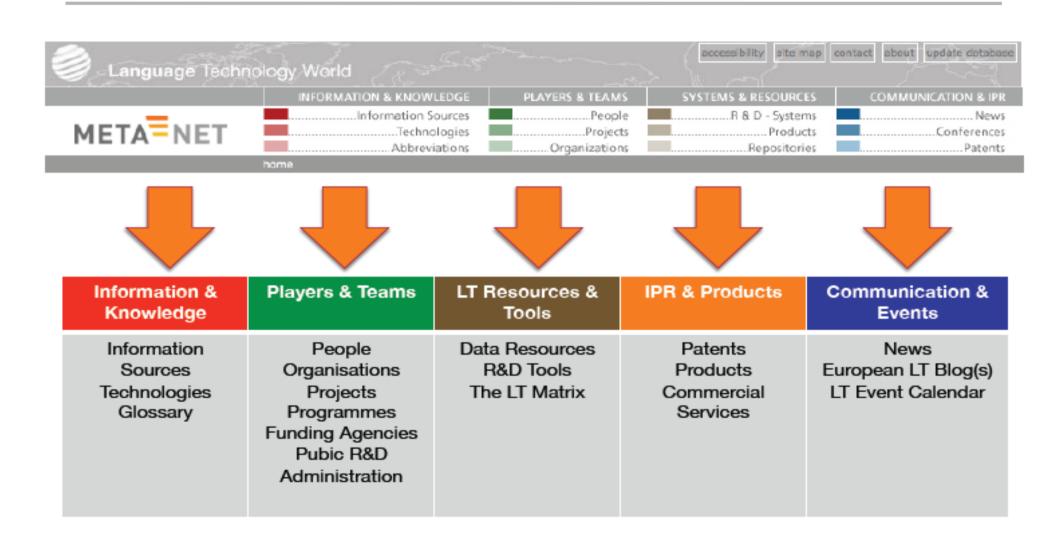


Selected areas for building bridges and opening new avenues

- Bringing more semantics into translation
- Optimising division of labour in Hybrid MT
- Exploiting the "context" for translation
- Broaden the empirical base for machine translation

### The Virtual Information Center (VIC)





### How can YOU participate (1)



- ◆ Centers of Excellence in language technology research will be involved as additional nodes of META-NET to strengthen its competencies and its geographic and linguistic coverage.
- ◆ For researchers, technologists, professionals, users and administrators developing, providing or using language technologies, META offers a unique platform to participate in discussions, working groups and planning activities thus shaping the linguistic future of Europe. They contribute ideas, become advocates for specific languages, technologies and applications or stay informed.
- Research and technology development projects can provide and use shared resources and become part of META-SHARE. They help to plan and validate META services.



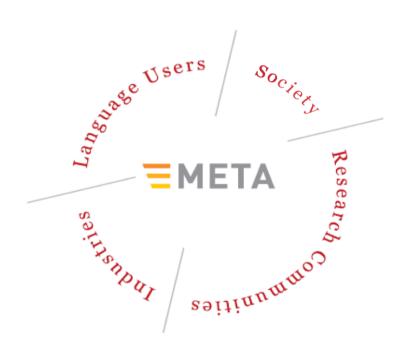


- ◆ Commercial enterprises are welcome to contribute their visions on products and services, participate in the planning process and use META for building profitable partnerships.
- ◆ Educators, schools, journalists, media, politicians, public administrations and organisations participate in the public discussions on the visions and the steps towards a truly multilingual information society.



- YOUR VOICE IS IMPORTANT, as is your language! But not only...
- ◆ Europe's language industry including language technology is considered worth 8.4 billion EUR, with an estimate of doubling this figure by 2015. Globalisation (of business), mobility (of persons) and immigration add to the increased need for multilingual services and solutions. In participating in META, you will shape the future of Europe's linguistic landscape. and
- ♦ With the appropriate plans and mobilization, we will be able to boost LT support significantly. In participating in META you will shape Europe's LT landscape.





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