



Strategic Objective ICT-2011.4.4

Intelligent Information Management

Twitter discussion: use **#so44**

Why do we need Intelligent Information Management

“Make content and knowledge abundant, accessible, interactive and usable over time by humans and machines alike.”

- **content** must be **made available** and its long term usability, accessibility and preservation must be ensured
- **effective technologies** need to be developed **for intelligent content creation and management** and for supporting the **capture of knowledge** and its **sharing and reuse**



Main general challenges

- Growth of organisational information
- Large and growing data quantity
- Multimodal information
- Unstructured data
- Heterogeneity of data and data sources
- Complexity
- Interoperability
- External shocks, e.g. financial crisis



Previous FP7 work

- Call extends goals of ICT-2009.4.3
- ICT-2009.4.3 resulted in 17 projects (13 contracts signed)
- Some topics covered: logistics, business intelligence, geospatial, linked open data



Intelligent Information Management

SO 4.4 Target outcomes



a) **Reactive algorithms, infrastructures and methodologies** for scaling data intensive techniques up to **extremely large data volumes** and **real time** performance. (Must: Rigorously tested on extremely large and realistically complex data sets coming from diverse resources contributed by organisations with a clear stake in the solution and a **clear path to deploying it** if effective). /STREP/

- the back end view of the problem: scalability matters
- IoT makes data streaming important
- many open scientific questions: parallelisation, approximation, online processing, compression , ...
- maximise platform utilisation
- identify bottlenecks



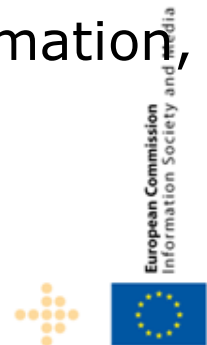
Intelligent Information Management

SO 4.4 Target outcomes



b) Intelligent integrated systems that directly support decision making and situation awareness by dynamically integrating, correlating, fusing and analysing **extremely large volumes** of disparate data resources and **streams**. (Must: Evaluated against the concrete requirements of relevant professionals and communities and tested on appropriately-sized user groups and extremely large data resources from the respective domains (e.g. finance, engineering, government, geospace, transport, urban management)). /IP, STREP/

- the front end view of the problem: insight matters
- IoT makes data streaming important
- many open scientific questions: parallelisation, approximation, online processing, compression , ...
- maximise platform utilisation
- identify bottlenecks



Intelligent Information Management

SO 4.4 Target outcomes



c) Framework and tools for benchmarking and exploring information management diversity and comparing and optimising the performance of non mainstream data management architectures and computing paradigms, novel data structures and algorithms on **extremely large volumes of data.** /STREP/

- allow meaningful comparisons across different solutions
- open the field to any technically viable solution
- establish rigorous methodology for evaluating performance
- study performance evolution trends
- identify bottlenecks
- foster industry confidence in view of future adoption



Intelligent Information Management

SO 4.4 Target outcomes



d) Targeted competition framework **speeding up progress towards large scale information management systems of global relevance.** /SA/

- put **concrete data problem** center stage
- open the field to any technically viable solution
- establish rigorous methodology for evaluating performance
- study performance evolution trends
- identify bottlenecks



Intelligent Information Management

SO 4.4 Target outcomes



e) Community building networks and other initiatives designed to link technology suppliers, integrators and leading user organisations. /CA/

- know who your community is
- know what their needs are
- bring cutting edge technology within reach of those who would benefit
- identify knowledge, organizational bottlenecks

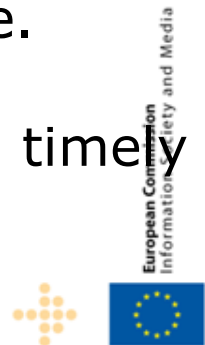


Intelligent Information Management

SO 4.4. Expected impact



- **Reinforced ability** for a wide range of innovators **to tap data infrastructures and to add value beyond the original purpose of the data** through data analysis.
- **Reinforced ability to find, reuse and exploit data resources** (collections, software components) created in one environment in very different, distant and unforeseen contexts.
- **Value creation** through extensive data collection and analysis.
- **Increased economic value** of data resources or data analysis services
- **New scientific investigations** enabled by large, inter-connected data resources and attending infrastructure.
- **Increased efficiency of organisations and better management of societal challenges** through more timely and better decision making.



Intelligent Information Management in Call 8



- **Publication of WP** : 23 July 2010
- **Call 8 Opening**: 26 July 2011
- **Deadline**: 17 January 2012
- **Indicative Budget**: 50M€
a+b+c: 43M€ (>30% IPs, >50% STREPs)
d+e: 7M€



Further info

- **ICT under FP7**

<http://cordis.europa.eu/fp7/ict/>

- **Experts data base:**

<https://cordis.europa.eu/emmfp7/>

- **Unit E2 – Technologies for Information Management**

URL: <http://cordis.europa.eu/info-management/>

eMail to: info-e2@ec.europa.eu

continuing Twitter discussion use: **#so44**



ICT Proposers' Day 2011
19 - 20 May, Budapest
Networking for European ICT R&D



- Aim of the event:
to prepare for Calls 8 and 9 (together >1 billion €)
 - by networking and partnerships building
 - by first-hand information from >100 EC officials

- Structure:
 - thematic sessions with presentations of proposal ideas
 - information stands & meeting points

- Registration:
free of charge, open from January 2011



<http://ec.europa.eu/ictproposersday>

Thank You!

