



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 time 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>



European Commission
Information Society and Media

Thank You!

