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CNECT.G.3

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last series of calls under the current programme:

- Challenge 4 *Digital Content & Languages* of the ICT work programme 2012-2013, released in July
 - Call-10: open Jul 12; close Jan 13; budget: 27 M
 - SME call: same schedule; STREP budget: 15 M (for data + language)
- Call-10, R&D, objective 4.1:
 - a) cross-media content analytics
 - b) high-quality machine translation
 - c) speech-enabled multimodal interaction
- **SME-Call**, innovation, objective 4.3:
 - b) **industrialisation** of promising technologies, first-use validation, business models & exploitation paths



<u>Call 10</u> - 4.1 Content analytics & language technologies

- deadline for proposals 15 Jan 2013 at 17.00 Brussels time
- thematic continuity with respect to Call 7:
- "bridge" to Horizon 2020 (2014+): higher ambition, cross-disciplinarity



as with previous calls, a few common features:

- written and/or spoken language, as required
- multi-lingual (i.e. multiple in/out languages), where relevant cross-lingual ("translation")
- handle everyday language, social media & user-generated content
- cope with massive volumes & diverse sources
- cater for contextualisation & personalisation
- technologies are generic & adaptive (language, domain, task)
 - but testing within specific application environments

new emphasis on

- go beyond pure text or speech:
 - 1) multi-media content & multi-modal interaction, and therefore
 - 2) multi-disciplinary approaches & partnerships



3 research lines ("outcomes"):

- a. (cross-media) content analytics
- b. (high-quality) machine translation
- c. (natural) spoken & multimodal interaction
- no cross-over, choose one of the above!
- for each line there is room for:
 - 1-3 STREP projects (75% funding) investigating new approaches & research avenues beyond the current SoA
 - up to 1 support action (100%) laying the foundations of coordinated efforts under H2020 (eg project clusters)

each line provides opportunities for

- ambitious forward-looking efforts, as well as
- o active co-operation with **progressive** vendors & users



projects: a) analytics

- some features:
 - exploring, interpreting, 'understanding'... rich, unstructured content: <u>interplay</u> of text, speech, audio & video
 - exploiting diverse, multilingual sources
 - delivering significantly better-than-SoA accuracy across languages & media mixes (EN text being the benchmark)
 - coupling accuracy with efficiency & broad coverage
 - based upon linguistics, semantics, statistics & whatever else it takes...!



features: b) translation

- significant improvement over today's MT quality
- not just re-combination of existing methods & techniques
- more than another MOSES-based platform with no substantial innovation
- no more post-edited MT, CAT & MT

features: c) interaction

- clear grounding in existing or emerging ICT platforms
- a prominent dialogue element, multiple modalities
- emphasis is NOT on speech recognition, transcription, signal processing



roadmapping actions (CSA projects)

- sectorial (see a-b-c)
- centred on needs & application scenarios, core technologies & research tasks, trials... defined & agreed with *industry*
- based upon common tools, data sets & standards; agreed reference architecture(s)
- common integration/evaluation methods & facilities...
- ... yielding strong alliances & credible plans



budget breakdown:

- projects (STREP, 75%): no less than 21 M
- roadmapping actions (CSA, 100%): no more than 6 M
- no predefined allocation between the 3 project lines

typical scope/size:

- projects: up to 3 years, up to 3 M funding
- support actions: up to 2 years, up to 2 M funding
- strategic involvement of vendors & users a definite asset
- 'multiple' languages: it depends, 3 is a minimum
- size of the consortium: as big (as small) as it takes



SME Call - 4.3 SME initiative on analytics

- 3 project lines:
 - a. Open Data Reuse Incubator
 - b. Easing Transfer and Take-up of LT
 - c. Software and Applications based upon Reuse of Open Data
- key parameters (different from Y2011 call):
 - up to 2 years, up to 1.5 M funding
 - 2+ SMEs, > 30% of the funding
 - 1-step evaluation, 20 pages maximum



4.3.b Easing transfer and take-up of LT

... bringing ["intelligence" related] language **technologies** closer to **commercial maturity** through an **industrialisation process** including:

- (i) engineering of promising but commercially untested technologies
- (ii) integration within existing or upcoming products and services;
- (iii) first-use experimentation and validation;
- (iv) *in-depth assessment* along technical, user related and economic dimensions;
- (v) *identification* of possible exploitation paths, viable business models, suitable sources of funding.



Pre-proposal service:

- free assessment of your proposal idea
- non-committing, does not prejudice evaluation
- send to <u>CNECT-G3@ec.europa.eu</u>
- compact: 1-2 pages
- closes 4 weeks before call deadline, but if you want useful feedback: send no later than 1 Dec.



new programmes 2014-2020

- research (H2020)
 - innovation (H2020)
 - infrastructure (CEF)



The new programmes (2014-2020)

Horizon 2020 (H2020) - research & innovation

Connecting Europe Facility (CEF) - pan-European service platforms/service infrastructure

Both have the status of legislative proposal, adopted by the European Commission and addressed to the "legislators" (the Council and EP)



H2020 (2014-2020):

- budget (EC proposal): 80 B, ~20% for ICT
- research & innovation
 - excellent science (ERC, FET, research infra)
 - industrial leadership (most mainstream ICT themes)
 - societal challenges (e.g. health, ageing, education...)
- access to risk finance
 - consists of Debt Instrument and Equity Instrument
- innovation in SMEs: dedicated SME instrument
 - funding & financing early stage high risk research and innovation, stimulating break-through innovation, commercialisation of research results



H2020 ICT part

EC proposal sets out 6 activity lines, expected to cover the full range of needs:

- new generation of components & systems
- next generation computing
- future internet
- content technologies and information management
- advanced interfaces and robotics
- micro- and nanoelectronics, photonics



H2020 ICT part - Content technologies and information management

Proposed objectives and content:

- provide new tools to create, exploit and preserve content in any language
- provide new tools to model, analyse and visualise vast amounts of data
- new technologies for language, learning, interaction, preservation, content access and analytics
- IIM systems based on advanced data mining, ML, statistical analysis and visual computing



H2020 What happens now & next

- on-going discussions with Council & EP
 - outcome depends on concomitant discussion of MFF (= money for all EU policies)
 - so far, support for H2020 & ICT
- scope of individual ICT themes is not decided
 - stakeholder consultations will be launched after summer 2012
- early orientations by Q1 2013
 - first series of calls towards Q4 2013



CEF (2014-2020):

- **TEN model:** pan-European, public-interest infrastructures
- 3 pillars: Transport, Energy & ICT (new, 9 B proposed)
- for ICT: (i) Broadband & (ii) *Digital Service Platforms*
 - eGovernment services, eHealth, eCulture...
 - Multilingual Access to online Services (new)
 - Open Data Portal (data.eu)
- discussions on-going with Member States (Council working parties) and European Parliament, update in the autumn
- discussions have been positive and constructive; main challenge is effective communication, concrete illustration of needs, benefits, features, implementation...



CEF Multilingual:

"... enable providers of online services to offer their content & services in as many EU languages as possible, in a most cost effective way."

addressing:

- public services esp. eGovernment, eHealth, eCulture,
 Open Data portals
- commercial services eg eCommerce
- where appropriate, user-generated content (social media)



- less than 40% of Europeans (outside UK, IE) understand English, less than 10% accept to use online services in English
- multilingual services are necessary to:
 - unify the EU online market from 20+ "sub-markets" to one single market of 500+ million consumers
 - enable the provision of public services across national borders
 - unleash the power of global online communities



Thank you!

cordis.europa.eu/fp7/ict/language-technologies/

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