

EU research in Content & Knowledge technologies: Progress & prospects

Roberto Cencioni & Stefano Bertolo

DG Information Society and Media
Unit INFSO.E2

infso-e2@cec.eu.int

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Basic facts

- by Q1 2006: 58 projects, 260 M€ funding
- 443 participants, 638 participations:
 - 52% public, education, ... participants
 - 48% private, commercial, ... participants
- 32 countries; 58% from top 5 countries (DE, UK, FR, IT, ES)

Scope

- RTD&D
 - long term research (formal, theoretical)
 - technology / component research & development
 - applied, system-level research
 - demonstration
- Emphasis on
 - generic, enabling technologies
 - flexible, cross-sectoral application platforms

3 project lines

1. Cross-media Content (call 2):
new media paradigms, new forms of digital content
creativity, interactivity, user experience & control, cross-platform delivery & presentation / adaptation...
2. Content & Knowledge (call 4):
“intelligent” content
access & management (meta data generation / extraction, semantic indexing & contextual retrieval...), aggregation & personalisation, automated workflows...
3. Knowledge (calls 1 & 4):
intersection of Web, MM and KR&R (*SemWeb+*)
networked information & communities; automation of knowledge lifecycle; web / multimedia “documents”; from static to dynamic information, interaction & evolving processes

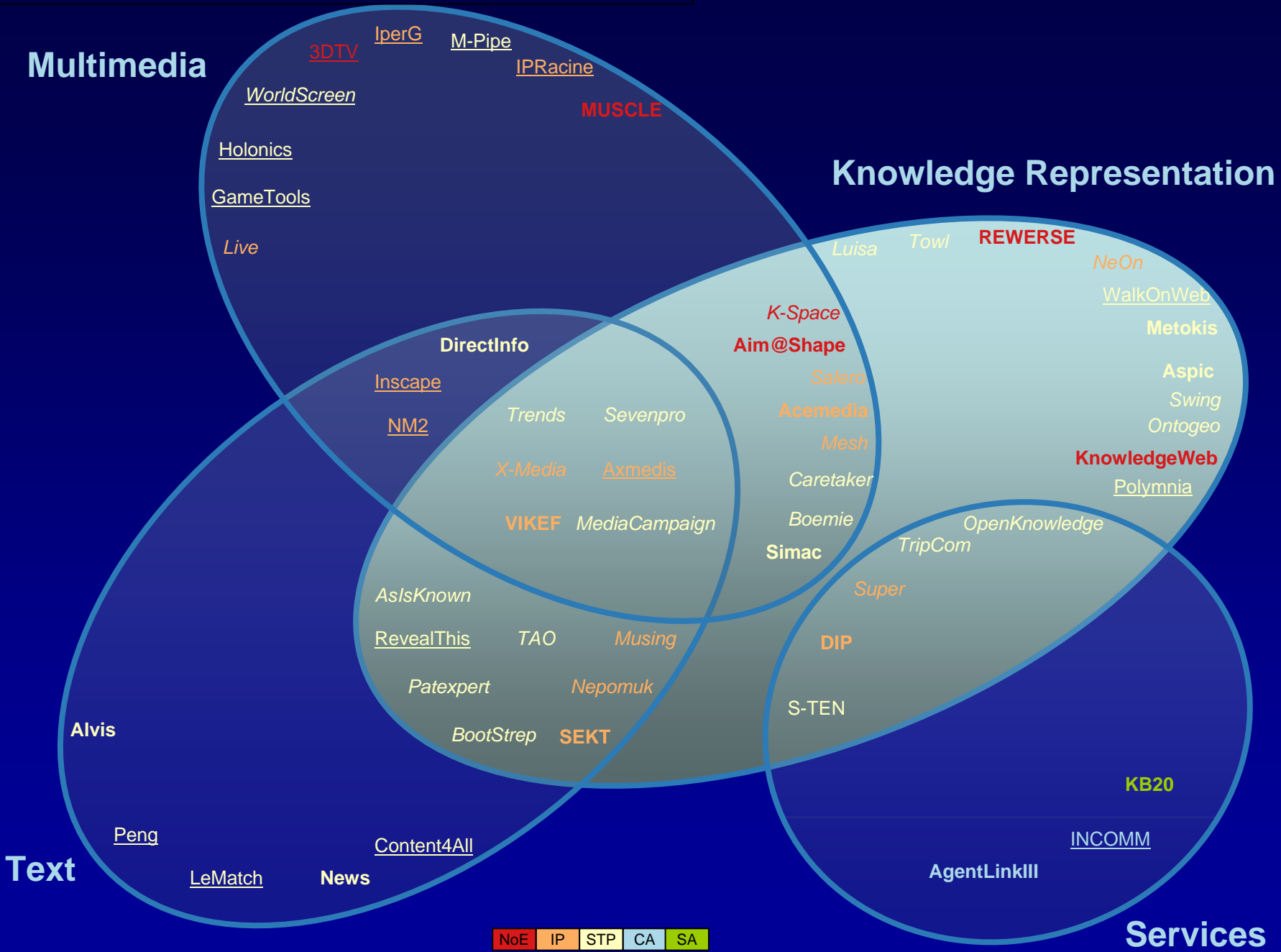
Content: 2 research tracks

- content is King: everywhere in the IST programme!
- our approach:
 - long term vision, beyond today's commercial imperatives
 - more compelling content, more effective creation & flexible (re-)use
 - more digital-born content, better content, at a lower cost
 - commercial content, as opposed to scientific, medical, educational... content
- two intertwined tracks:
 - **creation**
 - provide better user experience & control
 - by pulling together & integrating ICT advances
 - **access & management**
 - content analysis & categorisation (text + image, video, audio, n-D objects)
 - (semantic / contextual) search & retrieval
 - personalisation & reuse
 - aggregation & work flows ...

Outcome of Call-4

- 150+ submissions received
- 25 proposals retained, nearly 250 organisations
- 124 M€ total funding
- **largest EU call ever** in the ICK domain
 - projects due to start Q1 2006

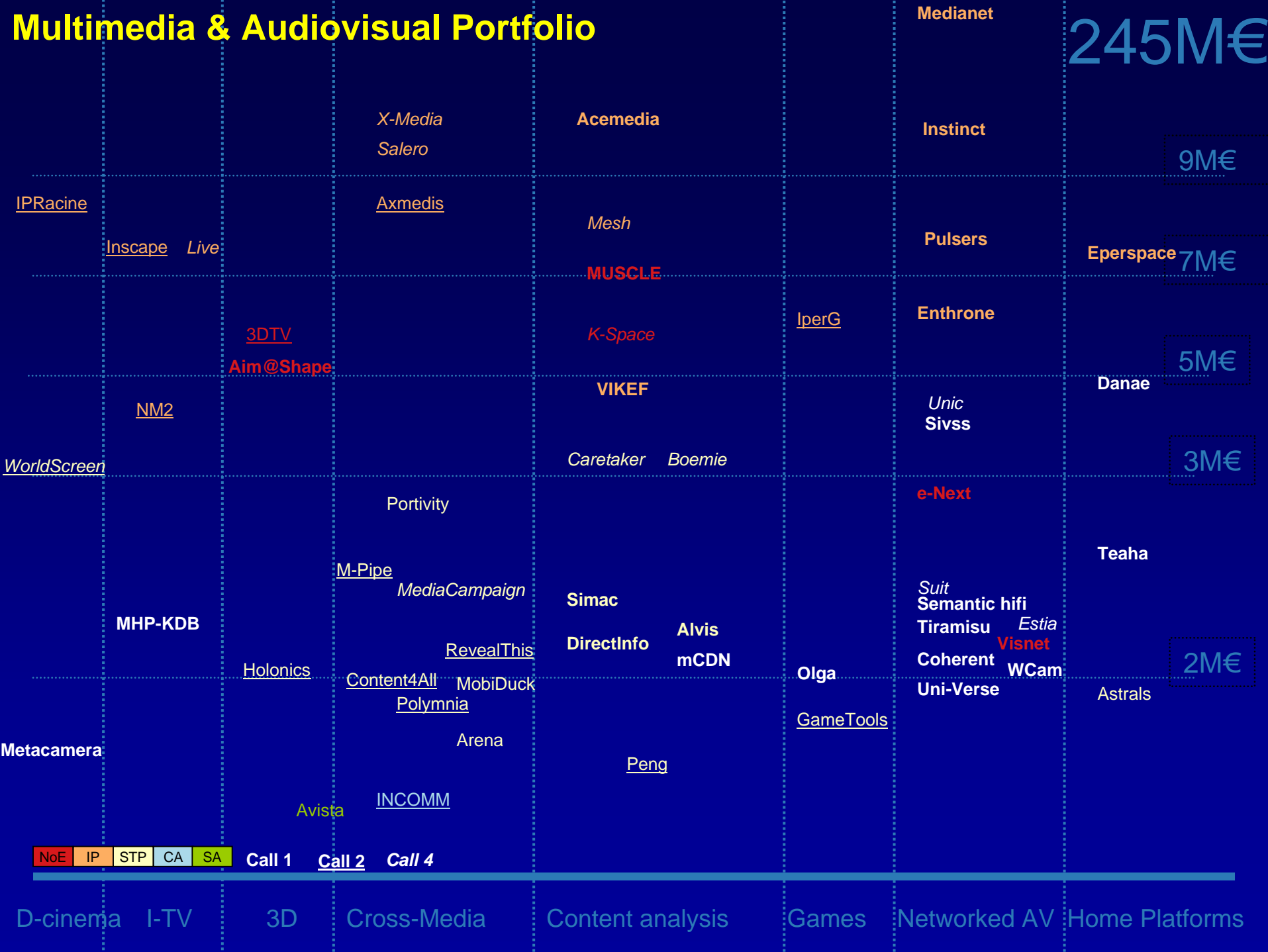
Knowledge & Content Portfolio



NoE
IP
STP
CA
SA
 Call 1 Call 2 Call 4

Multimedia & Audiovisual Portfolio

245M€



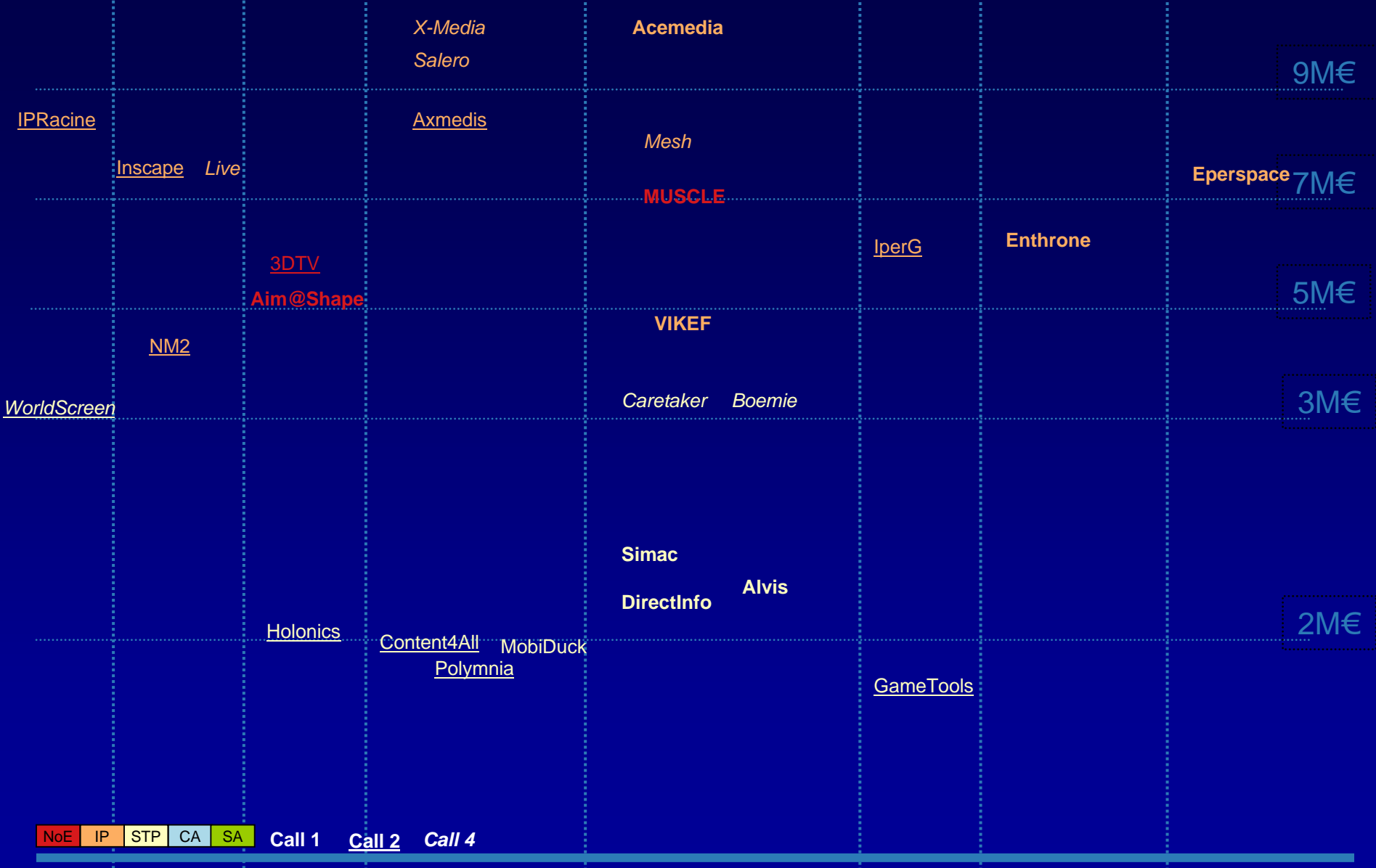
NoE IP STP CA SA

Call 1 Call 2 Call 4

D-cinema I-TV 3D Cross-Media Content analysis Games Networked AV Home Platforms

Content

30M€



NoE IP STP CA SA Call 1 Call 2 Call 4

D-cinema I-TV 3D Cross-Media Content analysis Games Networked AV Home Platforms

Authoring & Workflow

19.3M€



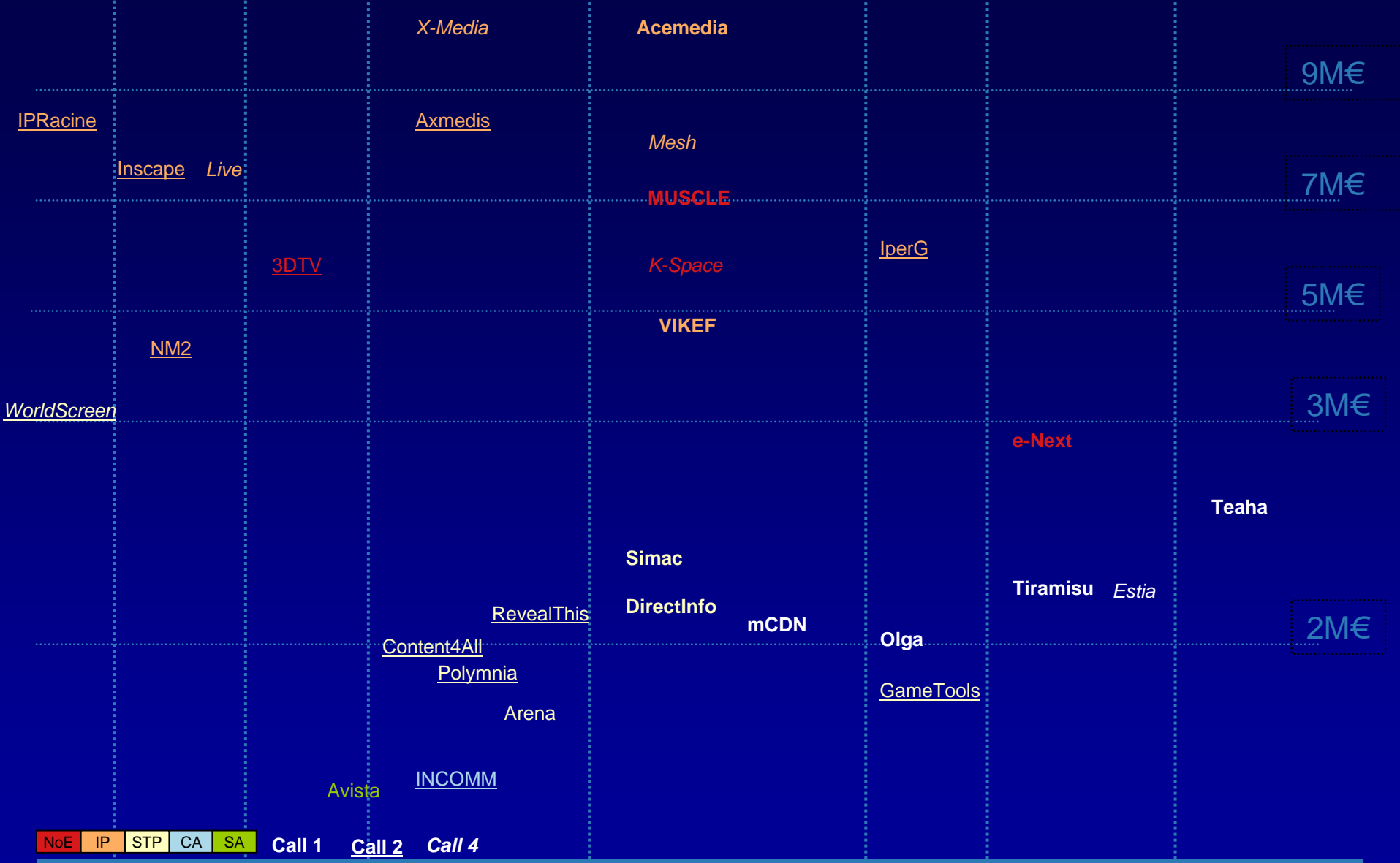
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Call 1 Call 2 Call 4

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Personalisation

21.6M€



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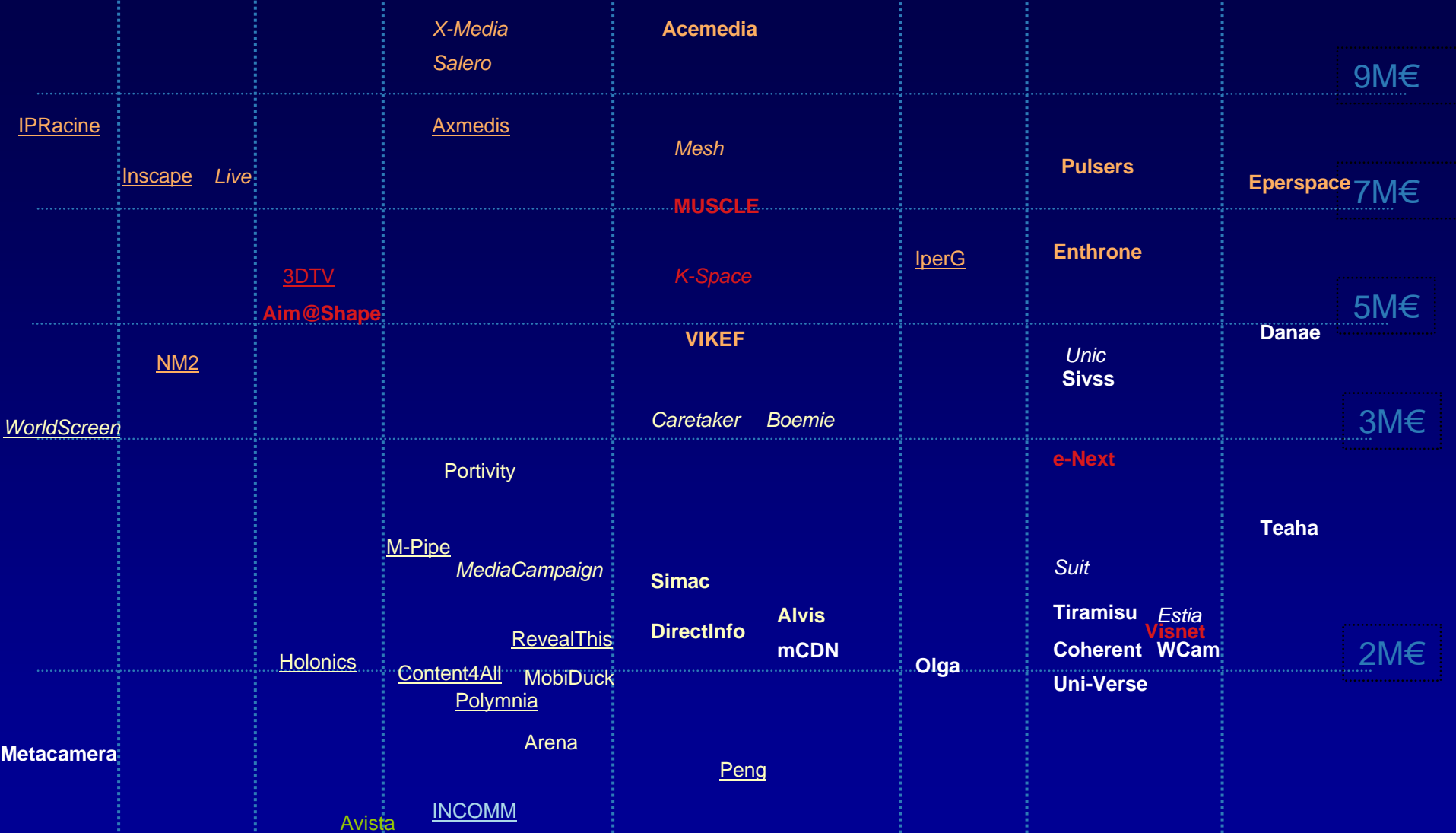
Call 1 Call 2 Call 4

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Access & Management

Medianet

55M€



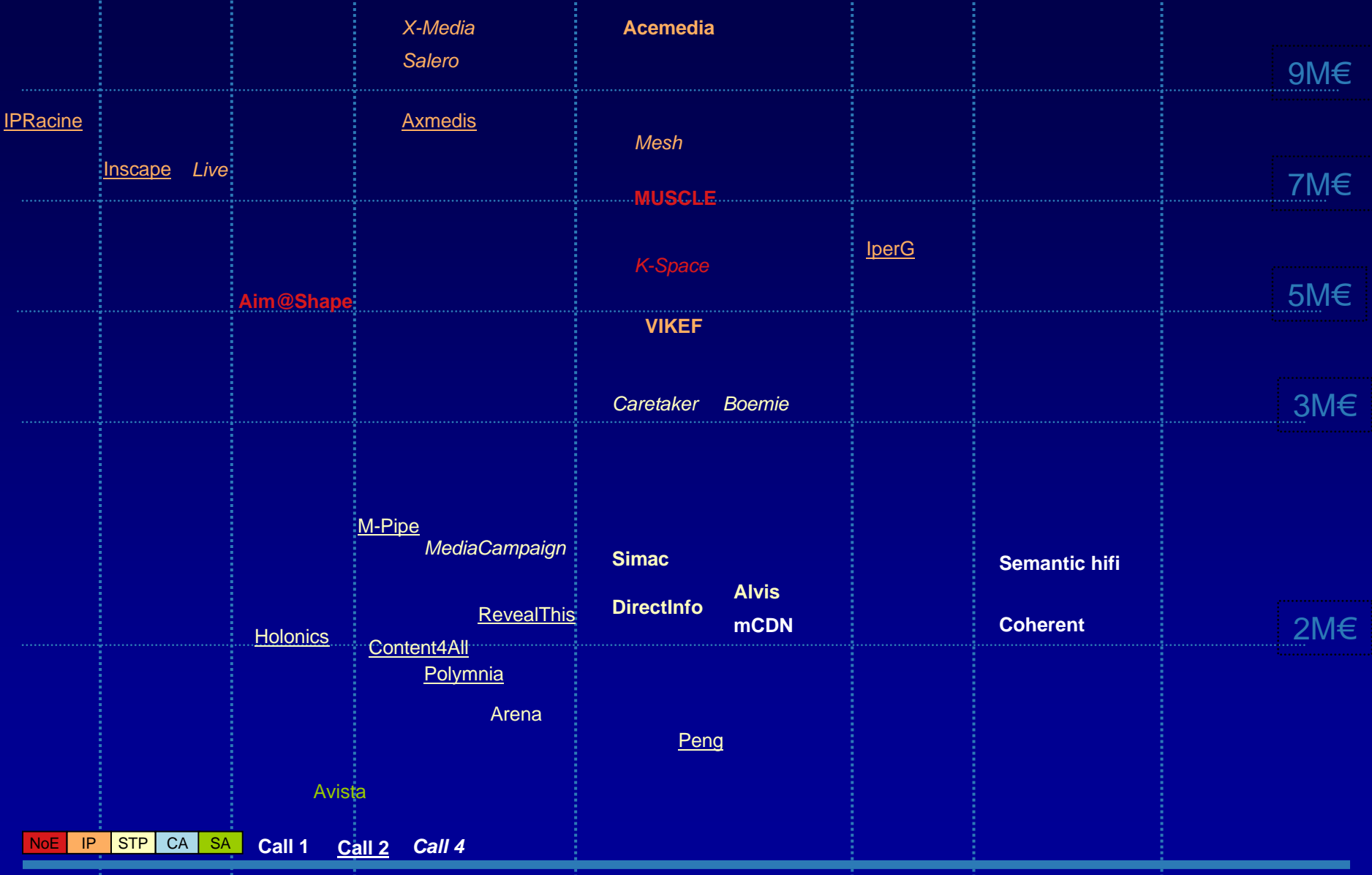
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Call 1 Call 2 Call 4

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Metadata & Semantics

26.1M€



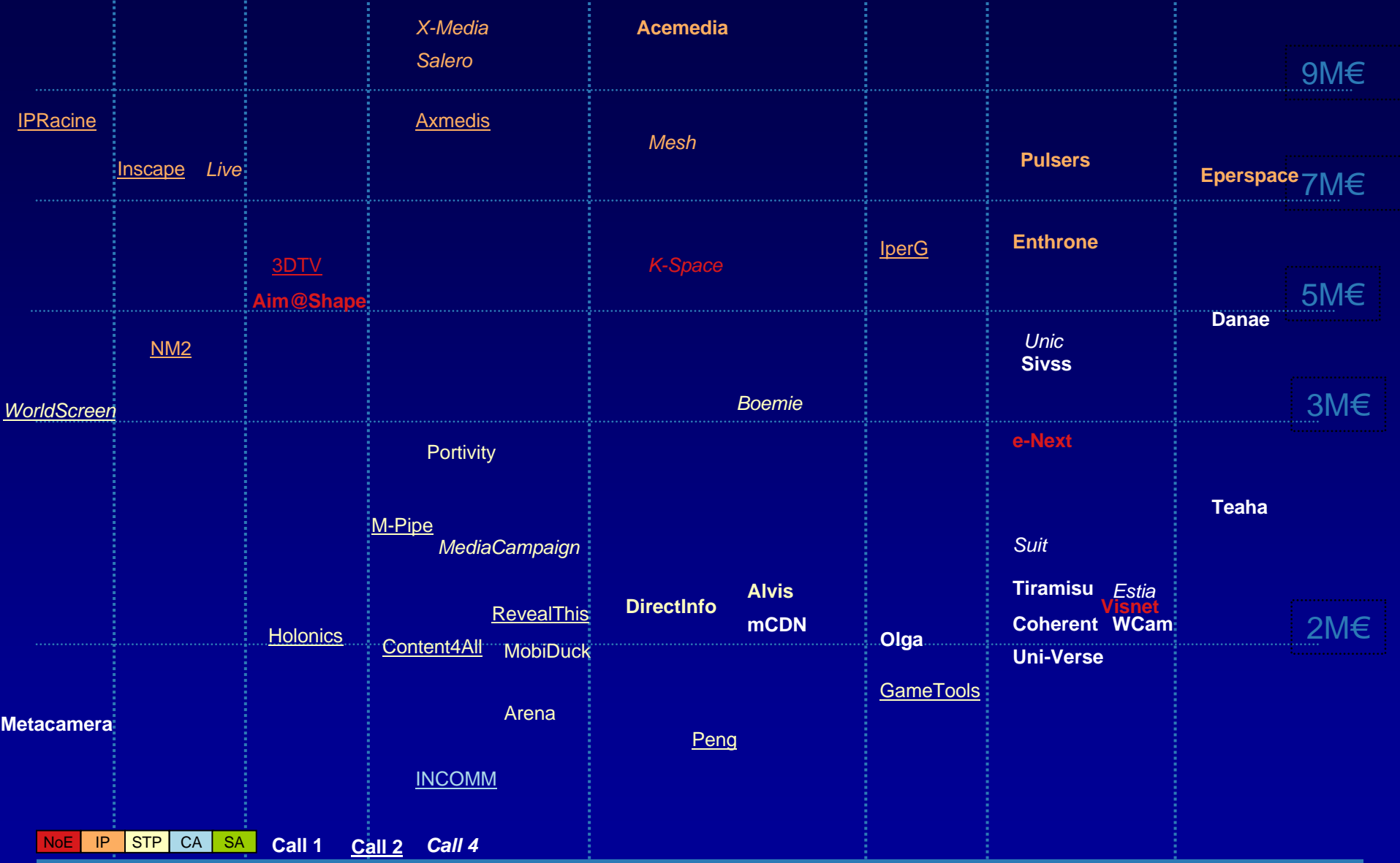
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Delivery & Networking

Medianet

61.4M€



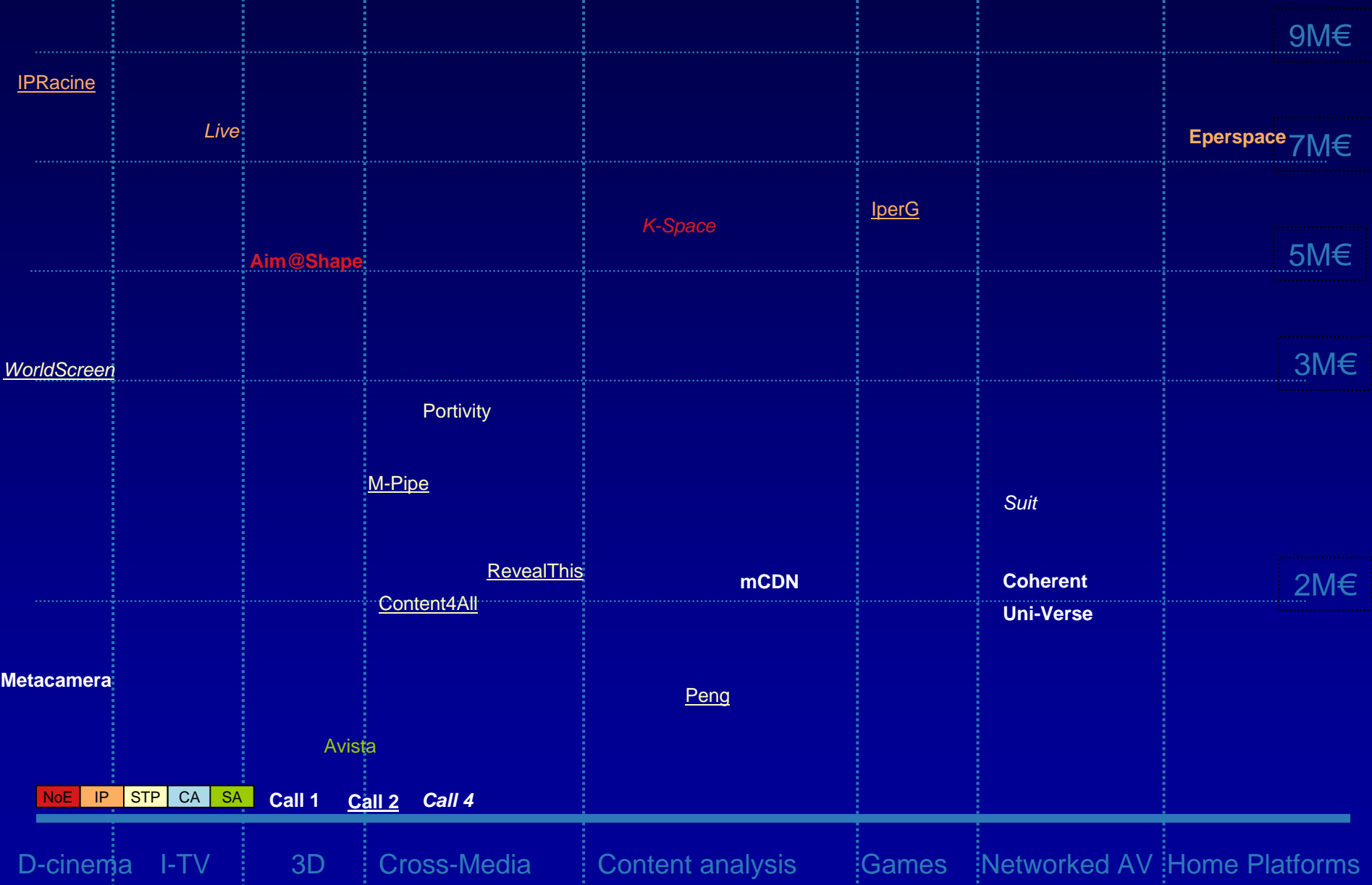
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Call 1 Call 2 Call 4

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Standards & Interoperability

10.7M€



NoE IP STP CA SA Call 1 Call 2 Call 4

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Digital Rights Management

Medianet

7.2M€

Axmedis

Pulsers

Eperspace

9M€

7M€

Enthron

5M€

3M€

Teaha

Tiramisu

2M€

Uni-Verse

NoE IP STP CA SA

Call 1

Call 2

Call 4

D-cinema

I-TV

3D

Cross-Media

Content analysis

Games

Networked AV

Home Platforms

Creativity tools: Salero

- Integrated Project, 48M
- lowering cost of content creation, creation and management of intelligent content objects, adaptation across different platforms, knowledge based control of appearance, sound, behaviour, artists and creative media professionals

Intelligent content mgmt: Acemedia

- Integrated Project, 48M
- semantic multimedia analysis, semantic indexing/search, mpeg-7 descriptors, automated content collection, device adaptation, personalization, scalable video coding, content/metadata/intelligence layers

Networking & distribution: Medianet

- Integrated Project, 24M
- multimedia communications, AV distribution, residential services, supply chain architecture, cooperation, digital rights management, home networking

Towards FP7

- new framework expected to start end 2006
- main proposals (FP, SPs, RfP) forwarded to Council & Parliament
- significant budget increase ... depending on EU financial perspectives after 2006
- traditional as well as new SPs (eg Space)
- multinational collaborative research (Cooperation SP) as well as grants for individual teams (Ideas SP)

ICT research within FP7

- IST rebranded - now simply ICT, ~2 B€ / year
- still the largest thematic component within FP
- centred around 4 components:
 - Core Technologies (incl. Knowledge)
 - Integration of Technologies (eg personal, home)
 - Applications Research (incl. Content)
 - Future and Emerging Technologies
- Knowledge placed next to (human & artificial) Cognition
- Content (commercial, corporate...) next to educational & cultural Content
- by and large, the proposed structure does not follow current DG-INFISO organisational lines ...

See www.cordis.lu/fp7/

Timeplan

- timeframe:
 - phase 1 (directions & priorities) => March 2006
 - phase 2 (strong justification!) March-May
 - phase 3 (workprogramme) June-July
 - phase 4 (focus of initial calls) July-Sep
 - phase 5 (spreading the word...) Oct-Dec
- elicit input from ALL relevant circles:
 - research topics
 - continuity vs. new directions
 - emerging challenges vs. gaps & failures in FP6
 - long term research vs. development & validation
 - relationships vis-a-vis adjacent topical areas
 - instruments & shared infrastructures
 - stakeholders: S&T communities & disciplines
 - ICT and media industry, user industries

We need your input, now!

- work ahead:
 - assess FP6 portfolio, identify gaps & duplications
 - screen vendors & integrators, market drivers & products
 - gather socio-economic justification, facts & figures
 - sounding board (virtual / physical meetings)
 - expert roundtables (Bxl / Lux / at major conferences)
 - open public consultation
 - by email
 - web based
- for each candidate research topic:
 - why public intervention
 - why at EU level, rationale & added value
 - expected impact (scientific, technological, economic)
 - time-to-maturity/exploitation & (eventual) application space

Some issues

- Content & Knowledge the largest topical area in FP6, budget likely to remain ~ constant in FP7, so
 - ongoing **convergence** of Knowledge & multimedia Content tracks
 - new and emerging research **challenges**
 - which research lines can be **discontinued** to make room for new research topics
 - how to **share more widely** & effectively precompetitive research results
 - how to **enhance impact & promote uptake**: more focused approach to application domains or research tasks?
 - how to foster more **ambitious endeavours**
 - how to stimulate **synergy** with national & industrial initiatives
 - how to **broaden the programme base**
 - more research centres, more companies, more high-tech users

More information

www.cordis.lu/fp7/

Our website (under re-construction):

- www.cordis.lu/ist/kct/

Your input (1 page per topic):

- infso-e2@cec.eu.int

Inquiries:

- stefano.bertolo@cec.eu.int
- roberto.cencioni@cec.eu.int