



Ministère de l'Éducation Nationale, de l'Enseignement Supérieur et de la Recherche

The Evaluations of the French ICT Research and Innovation Networks

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MR support to ICT

- **Technological Research and Innovation Networks (RRIT)**
 - 4 on ICT / 16 overall funded on Technological Research Fund (FRT)
 - RNRT (Telecommunications) (1998)
 - RMNT (Micro/nanotechnologies) (1999)
 - RNTL (Software technologies) (2000)
 - RIAM (Audiovisual and multimedia) (2001)
- **Basic Technological Research**
 - Large research facilities : Nanotechnology centers
 - Generic technologies evaluation programs (language, vision)
- **Basic Scientific Research**
 - Inciting Concerted Actions (ACI) funded on FNS
- **Regional research activities**
 - Competitiveness Poles

RRIT Networks

- **Governance**
 - President (industry), Vice-President (public research)
 - Advisory Committee (COS)
 - Executive Office (BE)
- **Peer Evaluation of R&D project proposals**
 - Evaluation Committee (CE) + Expert Pool
- **Research / industry cooperation**
 - R&D
 - Content of the Call for Proposals / Proposals / Selection
 - Projects: 3 partners, 1 public research, 1 industry
 - Accompanying measures (networking)
 - Annual conferences, Workshops, Web sites, reports...

RRIT Financial support

- **Interministerial collaboration**
 - Research (MR), Industry (MinEFI), Culture (MCC) for RIAM
- **Separate funding (based on type of project, not type of partner)**
- **3 types of projects**
 - Exploratory projects (E)
 - Precompetitive projects (PC)
 - Platforms (testbeds open to outside projects) (PF)
- **Funding from MR :**
 - Public laboratories : 100 % marginal cost
 - SMEs : 50 % total cost
 - Large companies :
 - 20 % total cost
 - 35 % if at least one SME in the consortium

Financing ICT RRIT

- From 1998 to 2003:
 - 1400 submitted proposals, 500 labelled projects
 - Total effort : 840 M€
 - 410 M€ public support (MR, MinEFI, MCC)
 - 430 M€ industrial support
 - 50 % funding from industry
 - 75 % spending by industry
 - If permanent researcher salaries added = 1.2 B€ total effort

ICT RRIT Evaluation

- Planned at the launch of the RRIT
- Call for Tenders
 - Independent Consulting Companies
- Selection by Committee (Ministries administrations)
 - RNRT (2002) : Technopolis
 - RNRT cartography (2001)
 - RIAM (2004) : Idate
 - RNTL (2005) : Technopolis
 - RNTL White Book (2004)
 - RMNT (2005) : Yole Consultants
 - RMNT White Book (2003)

ICT RRIT Evaluation

- **Install a Pilot Committee**
 - Ministries and Agencies Project Officers
 - Representatives of professional organizations
 - Foreign participation
 - Representatives of large public organizations or companies
 - Representative of the European Commission
- **About 4 meetings**
- **Presentation of final results**
 - To the Pilot Committee
 - To the RRIT Executive Office – Adapt the report
 - To the RRIT Advisory Committee – Get feedback on the report
 - Public presentation (Conference, specific workshops)
 - Report delivered to Ministries

RNRT (Telecommunications)

- **First RRIT (1998, alternative to CNET), 5-year term**
- **Advisory Committee (COS)**
 - Two meetings per year
- **Executive Office (BE)**
 - Meetings weekly
- **Fixed date Call for Proposals (1-2 per year)**
- **Evaluation**
 - 5 Thematic Committees (CT)
 - 16 people (research / industry)
 - Selection conducted by BE + Rapporteur / Deputy Rapporteur
 - Labelling by COS

RNRT Evaluation

- Objectives of the evaluation
 - Impact on R&D telecommunications activities in France
 - Research results
 - Network management
- Instruments
 - Document analysis
 - Interviews (40)
 - Questionnaire to project representatives through mail
 - International panel peer review
 - International comparison with similar programs

RNRT Evaluation (Impact)

- Most of the targetted objectives have been reached
- Recommendations
 - Conduct more strategy, in line with EC FP6
 - Mix Top-down and Bottom-up approaches
 - Better integration of SMEs
 - Special Working Group
 - Associate SMEs in roadmap activities
 - More exploratory research
 - Better coordination with other ICT RRIT (convergence)
 - Joint programs with similar European programs

RNRT Evaluation (functioning)

- **Recommendations:**
 - Specific Call for SMEs
 - Representative of SMEs in BE
 - Accelerate payment of funding (Ministries)
 - Increase financial support for accompanying measures
 - Conference, workshops, studies...
 - Better participation in project follow-up (include CT)

RNTL (Software Technologies)

- **Created 2000, 5-year term**
- **Advisory Committee (COS)**
 - Two meetings per year
- **Executive Office (BE)**
 - Meetings every two weeks
- **Fixed-date Call for Proposals (1-2 per year)**
- **Evaluation**
 - Evaluation Committee (CE)
 - 30 people (research / industry) + Expert pool (~ 200 experts)
 - Selection conducted by CE (3 meetings)
 - Labelling by COS

RNTL Evaluation

- **Three axes**

- Economical and industrial
- Technological
- Functioning

- **Findings**

- Structuring effect, although only 5% of French R&D effort
- Excellent “Research lab – Large company – SME” triangle
- Insufficient participation of Software companies (SSII)
- Priority to support Open Source approach is sound
- Structuring projects around platforms is excellent

RNTL Evaluation recommendations

- **Economical / industrial**

- Focus on products and industrial development
- Reinforce Open Source in connection with ACI

- **Technological**

- More focus on priorities (strategy)
- Reinforce projects activities around platforms

- **Functioning**

- Accelerate payment of funding (Ministry of industry)
- Guarantee funding (pluri-annual financial plans)
- Reinforce support to accompanying measures

RIAM (Audiovisual & Multimedia)

- Last RRIT (2001), 3-year term
- Advisory Committee (COS)
 - Two meetings per year
- Executive Office (BE)
 - Meetings monthly
- Open guichet
- Evaluation
 - Executive Office
 - 12 people (research / industry / administrations)
 - Expert Pool (~200 experts)
 - Expertise and labelling
 - By BE for smaller projects
 - By COS for larger projects

RIAM Evaluation

- Instruments
 - Document analysis
 - Interviews BE, COS, General Secretary
 - Interviews selected or rejected project representatives
 - Interviews European Project Officers, scientific experts
 - Questionnaire over the internet to the RIAM community
- Positive findings
 - Good valorization of results
 - Several prototypes, technology transfer
 - Good participation of SMEs
 - Good share of efforts from different backgrounds

RIAM Evaluation

- Findings and recommendations

- Coherent structure
 - R&D + accompanying measures is essential
- BE activity OK, COS unsatisfactory
 - Only BE in selection process
- Open Guichet questionable
 - Choice of “best” vs “good” projects
 - Annual budget management
- Include the experts in the selection process
 - Contradictory discussion
- Payment process too slow (Ministries)
- Attract alternative funding (regional, investors)

RMNT (Micro & Nanotechnologies)

- Created 1999, 5-year term
- Advisory Committee (COS)
 - 3-4 meetings per year
- Executive Office (BE)
 - 3-4 meetings per year
- Open guichet
- Evaluation
 - Executive Office
 - 12 people (research / industry / administrations)
 - Expert Pool (~200 experts)
 - Expertise and labelling by COS for all projects

RMNT Evaluation

- Objectives

- Economical and industrial impact
- Technological results impact
- Scientific results impact

- Instruments

- Project analysis (organization, partnership, topics, results)
- Interviews project representatives (face to face / telephone)
- Interviews BE and COS representatives
- Interviews two international experts (Japan, Switzerland)
- Interviews non-participating major companies

RMNT Evaluation

- Projects analysis

- 42 selected projects, 1 rejected project
- Reusability of projects results
 - Results reused in other projects (90%)
 - Results reused in European/international funded projects (57%)
- Economical and industrial impact
 - 15 new products and industrial transfer
 - 6 start-ups
- Scientific results impact
 - 43 theses, 14 postdocs, 270 articles in journals, 260 communications
 - Comparison with comparable Swiss program
 - Same funding, Same results while less academic, more focus (42/300)
- Technological results impact
 - 27 patents
 - 1 M€/patent (industry), 1.6 M€ (RMNT), 2.3 M€ (Swiss program)

RMNT Evaluation

- **Projects analysis**
 - Partnership
 - A Large Company coordinator looks for SMEs
 - A basic research coordinator looks for a large company
 - An applied research coordinator looks for basic research participants
 - An SME coordinator looks for basic research participants
 - RMNT generated new partnership
 - For SMEs (70%) and large companies (50%), not for public research
- **Functioning**
 - Selection and funding process too slow
 - Problem with funding from separate sources
 - Temporary rejection is time consuming
 - Better explanation of acceptance / reject
 - Participation of SMEs in COS insufficient

ICT RRIT Call 2005

- **Creation of the National Research Agency (ANR)**
 - « Information and materials » sector
 - Single guichet (although Poles, AII, CNC...)
 - Annual budget on special funds (CAS)
- **Follow-up of RRIT / ACI activities**
 - Evaluation of 4 ICT RRIT activities (+++)
 - Decision to renew 3 ICT RRIT + Nanos (RMNT / R3N)
 - Keep Basic Research Actions (ACI / ARA)
- **Open Basic Research Call : « White » program**
- **Larger financial support**
 - 150 M€ for (ICT + Nanos) (RRITs + ARAs)

ICT RRIT Call 2005

- **General changes / recommendations**
 - More coordination among ICT RRIT (convergence)
 - COCIR instead of 3 ICT COS + R3N COS
 - Closer links with Basic Research Actions (COCIR/COS)
- **Same evaluation mechanisms**
 - Annual / Fixed-Date Calls for Proposals
 - Evaluation by Evaluation Committee (CE)
 - BE + external members (industry / research)
 - Based on expertise by Expert Pool
 - Contradictory discussion in CE meeting
 - RRIT/ARA CE : different for ICT / same for Nanos
 - Evaluation results submitted to COCIR/COS
 - Main list + Ordered reserve list
 - Share of software tools (project submission, collaborative evaluation...)

ICT RRIT Call 2005

- **RNRT**
 - SME in BE
 - New type of projects targetting SMEs : « Innovative projects »
 - Strategic workshops
 - European workshops (Belgium, Finland, Germany)
- **RNTL**
 - Analysis of project results/strategic workshop for specific domains
 - Priority on Open Source / Platforms in Cfp 2005
- **Problems**
 - RRIT vs ANR programs
 - R&D + Networking
 - Support to accompanying measures from ANR
 - Content of the Calls + project selection
 - Projects follow-up

Conclusions

- **RRITs have proved their efficiency**
 - Excellent tool for cooperation between industry and public research
- **Ex post evaluation needed for monitoring programs**
 - Looking for Best Practices implies continuity of funding
 - Similar processes and structures facilitates RRITs collaboration
 - Impact assessment needs time
- **International cooperation feasible**
 - Joint RNTL – Academy of Finland ProAct program
- **Perspectives**
 - ANR / RRIT
 - RRIT / regional Competitiveness Poles
 - RRIT / EC Platforms / Eureka clusters / ERA-Nets
 - Open to European cooperation (20% of ANR budget)