The national strategy for research and innovation in France (SNRI) 2009-2012

Paris, 17 January 2012
State-of-play (1)

1.1

- France: 5-6th in the S&T publication rankings, 4th rank for attractiveness of higher education
- First S&T partners (publications) : USA, United Kingdom, Germany; France is oriented towards Europe.
- Very good reputation in fundamental sciences (maths, physics, archeology…)
- Long-term strategic orientations : nuclear energy, space, transport, defence, agriculture
State-of-play (2)

1.2

- Difficulties to seize innovation sectors (biotechs, ICT, …)
- A public system lacking readability and good governance
- Universities with limited competencies
- Lack of connection between economy and research
- Lack of dialogue with society
Objectives

To define big orientations for France
- To push the frontiers of knowledge
- To answer a demanding society
- To address environmental urgency
- To support the national economy

To identify key technologies

To put again science in the center of the society
2 Method
2.1

- Governmental project (Ministry of higher education and research in collaboration with other ministries)
- Delivrable: Publication of a strategic report
  - Big challenges identified by a steering committee
  - For the next 4-5 years
  - Description, strategic analysis, proposals about actions (same budget)
- Principle: Recognized autonomy and responsibility of the French research actors (« orientation » level)
Consultation process involving about 600 people (ministries, scientists, big companies, SMEs, associations)

Organisation: A steering group, a task force, one expert group for each identified challenge with one rapporteur

Thematic: Life sciences, Environmental sciences, Materials, ICT/high performance computing/maths, Human being and society towards global challenges

Transversal: ERA, international position of French research, Innovation ecosystem, Science and society
Steps

2.3

- Identification of societal, knowledge and transversal challenges: validated by all ministries
- State-of-play
- Strategic reflection
- Synthesis
  - Dialogue between the experts in the working groups
  - Dialogue between the expert group and the steering committee
  - Dialogue between the steering committee and the cabinet
- Public consultation (Internet)
- Publication
- Presentation to the government
2.3 State-of-play and strategy

State-of-play: a SWOT analysis

- based on a shared diagnostic of strengths/assets and weaknesses of French public and private research
- identifying scientific issues and opportunities
- economic and regional dimension
- national, European and international level

Based on qualitative and quantitative indicators (e.g. patents, bibliometrics), an analysis of national and European policies (incentives, legal framework).

Strategy

- Reports including OECD, IPCC, FAO, Millenium Ecosystem Assessment
- Identification of last evolutions, potential uncertainties and breakthroughs
A general report: synthesis

A report for each working group
Results
3.1

- Integration in a world system
- Construction of the European Research area
- Promote basic research and multidisciplinarity – major role of SSH
- Open research to society and economy, control risks and enhance security
- Create a favourable innovation environment
3.2

3 priority areas

- Health, care, nutrition
- Environmental urgency
- Information, communication

At the core of emerging technologies biotechnologies, green technologies, nanotechnologies
4 Implementation
An example: the international strategy
SNRI: from reflexion to action

4.1

- A strategy which has to be set up and evaluated (realisation and impact)

- A strategy which continuously changes to face new societal and scientific challenges
A consultation structure for implementation

TRANSVERSE CONSULTATION GROUP « INTERNATIONAL » (TCGI)

GROUP « CHINA »

GROUP « INDIA »

GROUP « ASIAN DEVELOPED COUNTRIES »

WORKSHOP Health, welfare, food - biotechnology

WORKSHOP Environment - ecotechnology

WORKSHOP Information, communication and materials - nanotechnology

WORKSHOP Innovation
Objectives

4.3

- To build a consensus between the research actors, whose mission would be eventually to concretise the recommendations issued by the consultation structure.

- To define the French strategy of cooperation with the targeted country: the basis for the French position in the scientific cooperation discussions with this country.
2 steps

4.4

- Diagnostic of the S&T cooperation between France and the targeted country
- Strategic orientation plan

with deliverable for each step
Diagnostic of the S&T cooperation between France and the targeted country

- S&T strategy of both, the targeted country and France
- Analysis of the research and innovation system and the performance in the two countries
- State-of-play of current projects and cooperation instruments
- SWOT analysis of the S&T cooperation between the two countries
Strategic orientation plan

4.6

 ├── General recommendations
 ├── Thematic priorities and relevant cooperation instruments for each priority
4.7

Tools

- Bibliometrics
- An inventory of current research projects between France and the targeted country, based on a survey among French performing research organisations and universities
- Documents (reports, articles, notes of the embassy…)
- Hearing of experts
- A sharepoint
4.8

Preparation of SNRI 2
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