



France – National Embedment

1. RI definition	
In which points does the National Roadmap deviate from the ESFRI Roadmap?	
Categories	National Roadmap
Funding	
Categorisation of RI	
Access to RI	
Organisation within national procedure	
<p>The following principles must be applicable for RI:</p> <ul style="list-style-type: none"> • It must be a tool or a device that has unique characteristics identified by the scientific community that makes use of it as required for conducting high-level research activities. The targeted scientific communities can be national, European, or international, according to the case. • It must have governance that is identified, unified and effective, and strategic and scientific bodies for steering. • It must be open to any research community that wants to use it, accessible based on peer-reviewed scientific excellence; it must therefore have suitable evaluation bodies. • It can conduct its own research, and/or provide services to one (or several) communities of users that integrate the stakeholders of the economic sector. These communities can be present on the site, conduct work there on a one-off basis, or interact remotely. • Moreover, RI will in the future have to be able to: Produce a multi-annual budget schedule as well as a consolidated budget that incorporates the full costs, and make the data produced available, either immediately, or after an embargo period corresponding to the international practices of the field involved. 	



2. RI players in the national R&I system

The RI players within the R&I system are displayed in figure 7.

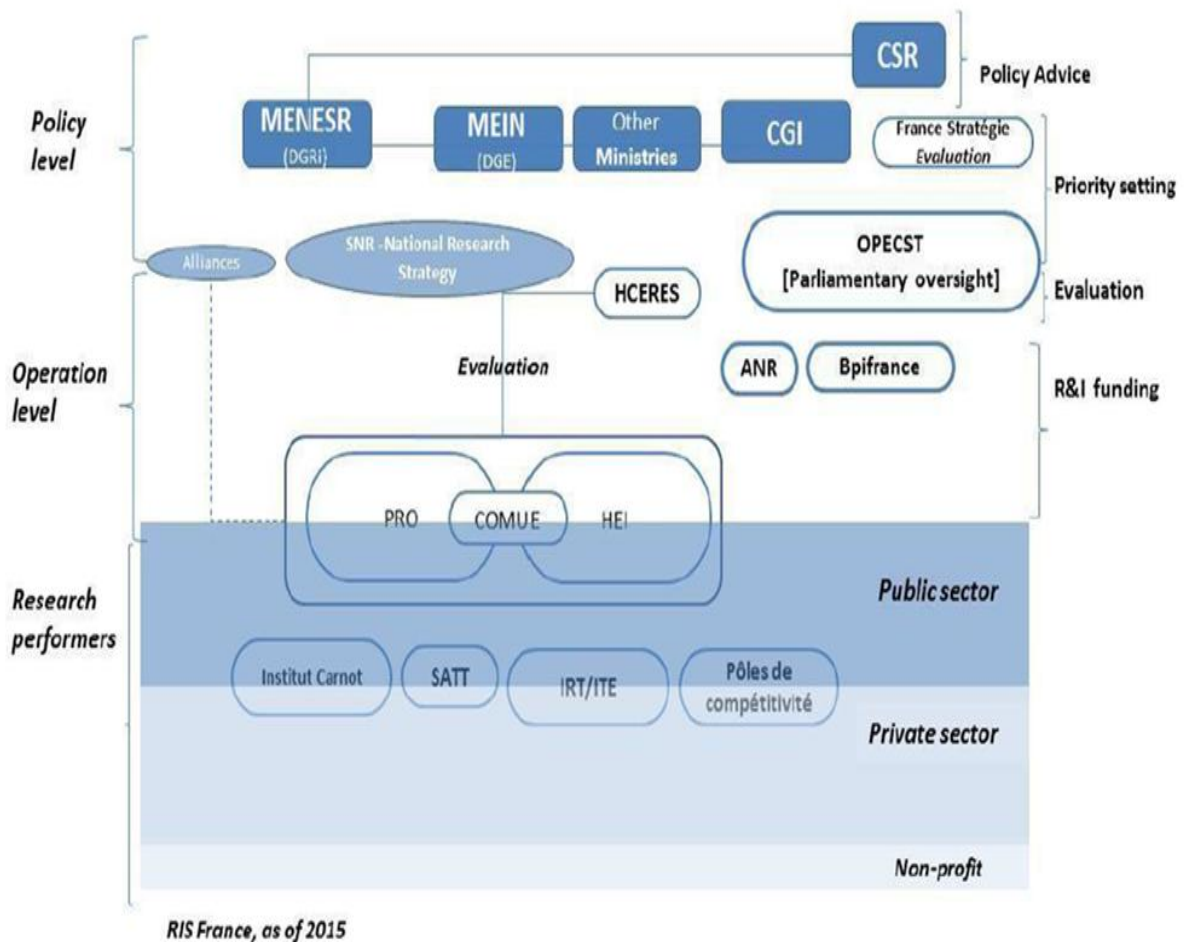


Figure 7: Organisational chart of the R&I system of France (Bitard & Zacharewicz 2016, p. 17).

Acronyms: ANR: National Research Agency, Bpifrance: Public Investment Bank, CGI: General Commission for Investments, CSR: Strategic Research Council, COMUE: Higher Education and Research Institutions and University Clusters, DGE: Directorate-General for Enterprises at Ministry of the Economy, Industry and Digital Sector, DGRI: General for Research and Innovation (within the MENER). HCERES: High Council for Evaluation of Research and Higher Education, HEI: Higher Education Institution, Institut Carnot: Research network of 34 institutes dedicated to fostering enterprise innovation through public-private collaboration, IRT: Technology Research Institute (Investments for the Future Programme), ITE: Energy Transition Institute (Investments for the Future Programme), MEIN: Ministry for the Economy, Industry and Digital Affairs, MESRI: Ministry of Higher Education, Research and Innovation, OPECST: Parliamentary Office for the Evaluation of Scientific and Technological Choices, *Pôles de compétitivité*: Competiveness clusters, PRO: *Organisme public de recherché*, SATT: Private company (full public capital) dedicated to boosting technology transfer from universities through intellectual property, SNR: National Research Strategy, NB: The 'bottom layer' encompasses Institut Carnot, SATT, IRT and '*Pôles de compétitivité*'.

National relevance of RI

With the RI National Roadmap France wants to achieve a controlled view on particularly heavy investments, allowing the state to have a solid basis for multi-year action plans. RI play a crucial

role for strengthening the competitiveness of the broad-based French research landscape through targeted investments and to make the data generated in research visible and accessible to the society. RI are one of the central prerequisites for excellent basic research, significant technological advancements and the development of new research areas. RI are essential for the performance of research and innovation in France.

Embedding of RI in the national R&I system

The French R&I system is **centralised at state level and is divided into three main areas** of activity: policy-making (policy level), implementation (operational level) and execution (enforcement of regulation). In 2014, a specific mission of evaluation of innovation policies and of the innovation policy mix was assigned to the General Commission for Strategy and Economic Foresight and a related committee was installed.

At **policy level**, the MESRI and the Ministry for the Economy, Industry, and Digital Affairs are responsible for research and innovation policy. The High Commission for Investments (CGI), which is subordinated directly to the Prime Minister, has a complementary structuring role. The Ministry for the Economy, Industry, and Digital Affairs is responsible for industrial research and plays a specific role on the subject of business R&D. Innovation policies are shared by the two ministries. The Interministerial Mission on Research and Higher Education (MIREs) is mainly responsible for research funding.

At **operation level**, the R&I system is structured around main research agencies. The High Council for Evaluation of Research and Higher Education (HCERES) carries out regular assessments of institutions, research units and courses and trainings delivered by HEIs. The Parliamentary Office for Evaluation of Scientific and Technological Choices (OPECST) is responsible for evaluating the effectiveness of the National Research Strategy (including public aid to private research). The National Commission for the Evaluation of Innovation Policies is in charge of evaluating innovation policies. The research is carried out by companies (private sector) and public research performers. (Bitard & Zacharewicz 2016)

3. RI in the National R&I System

In the French national R&I system competencies are shared between the different federal ministries with respect to policy, implementation and execution. At operation level, the French R&I system is structured around a number of agencies. The vast majority of public funding of research and higher education originates from a single interministerial budget, the MIREs (Mission interministérielle recherche et enseignement supérieur) (Bitard & Zacharewicz 2016). MIREs supervises 10 programmes of the national budget, 5 of these programmes are in the direct responsibility of the Ministry of higher education, research and innovation (MESRI) which covers 90% of the MIREs budget. Thus, the main ministry in charge of the budget dedicated to research is the MESRI.

The French Ministry of Higher Education, Research and Innovation (MESRI) has a ring-fenced budget for very large research infrastructures (VLRIs) and International Organisations (IOs). The budget is discussed annually with the Ministry of Economy and Finance (MEF) during the preparation of the annual state budget

The VLRIs and the IOs, which are on the national Roadmap, are considered as the national priorities and are financed directly from the ministry budget with a special budget line in the state budget.

4. Major national strategies for international cooperation in R&I and strategic integration of RI

The National Strategy for Research (SNR), following the EU's Europe2020 strategy and the Horizon2020 research programme, was adopted in 2015 and is entitled "France Europe 2020". It contains orientations according to which research performers shall alter their research priorities in



order to better meet societal challenges, in the context of the European research policy framework. (Bitard & Zacharewicz 2016)

The National Strategy on Research Infrastructures is accomplished in coherence with the National Strategy for Research, reinforcing the national effort to support fundamental research via long-term investment engagement into research facilities, equipment and personnel.

References

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- Ministère de l'Enseignement supérieur de la Recherche et de l'Innovation (2018). Questionnaire Mise à jour de la feuille de route nationale des Infrastructures de Recherche 2018.
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Further links:

- Mises à jour de la roadmap ESFRI et de la feuille de route nationale des grandes infrastructures de recherché H2020 - Journée nationale d'information <http://cache.media.education.gouv.fr/file/2015/05/0/H2020_INFRA_Feuille2Route-Actualites_InfoDay_20150915_470050.pdf> [Last access: 06/2017].
- Toute l'actualité stratégie de Ministère de l'Enseignement supérieur, de la Recherche et de l'Innovation <<http://m.enseignementsup-recherche.gouv.fr/pid29941-cid81160/mise-a-jour-de-la-feuille-de-route-nationale-des-infrastructures-de-recherche.html>> [Last access: 06/2017].

