



# InRoad deliverable 5.4

## FINAL RECOMMENDATIONS ON BEST PRACTICES AND COMMON STANDARDS FOR RI BUSINESS PLANNING



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# FINAL RECOMMENDATIONS ON BEST PRACTICES AND COMMON STANDARDS FOR RI BUSINESS PLANNING (D5.4)



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## EXECUTIVE SUMMARY

This report proposes recommendations on business planning for RIs, and evaluation of business plans in view of RI roadmapping and funding.

Targeted at RI managers and policy-makers, such as funding organisations, the recommendations aim at ensuring the long-term sustainability of RIs by promoting business plans widely as a valuable management tool to ensure RI growth, and as an indispensable criterion in roadmap and funding processes.

These recommendations are illustrated by good practices based on real cases, and supported by the findings from desk research, a consultation and field work (case studies and regional technical workshops), findings which are presented in more details in deliverables D5.2 – D5.3. Furthermore, the recommendations have been discussed and refined with the Reflection Group and other stakeholder’s representatives during InRoad’s Validation workshop.

The recommendations from this report, as well as the analyses from the case studies and consultation, are presented in the [InRoad final report<sup>1</sup>](#).

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<sup>1</sup> InRoad final report, pp. 33–42 and 119–147



## INTRODUCTION

This document sets out InRoad's final recommendations on best practices and common standards for research infrastructure (RI) business planning addressed at managers of established and emerging RIs, and funders.

The recommendations outlined are based on qualitative and quantitative data collected throughout the past 24 months, including a consultation on national practices related to decision-making and funding for RIs, three in-depth case studies involving two distributed pan-European RIs ([EMBRC ERIC<sup>2</sup>](#) and [BBMRI ERIC<sup>3</sup>](#)), a country case study (Norway) covering the perspectives of a national funding agency and three RIs, individual case studies of national and European RIs, as well as feedback obtained from five regional technical workshops held in Prague, Rome, Hamburg, Aveiro and Wroclaw with stakeholders from the RI community, policy-makers and funding organisations.

Precisely, the recommendations outlined in the next pages cover the following topics:

1. the role of business plans in ensuring the long-term sustainability of RIs;
2. the value of business plans for aligning strategies between the central hub and nodes in distributed RIs;
3. the benefits of business planning to achieve robust RI growth and for national roadmap evaluations;
4. a set of components to be considered to draft a sound business plan; and
5. the professionalisation of business plan drafting and its implementation.

The recommendations listed throughout the document are complemented by background information to provide context to the work done by InRoad, and good practices based on real cases to bring the reader closer to the issues being discussed.

InRoad hopes that these recommendations will contribute to help RI managers design and implement business plans in their state-of-the-art facilities, and will also facilitate the decision-making in roadmap evaluation and RI funding processes.

Finally, InRoad members would like to warmly thank everyone who offered their time to participate in the various stages of data collection, from the InRoad consultation to the case studies and interviews. Their involvement made it possible for InRoad to achieve its objectives, and to present its main findings and conclusions in the final report.

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<sup>2</sup> European Marine Biological Resources Centre, <http://www.embrc.eu/>

<sup>3</sup> Biobanking and BioMolecular Resources Research Infrastructure, <http://www.bbmri-eric.eu/>



## ENSURING LONG-TERM SUSTAINABILITY OF RIs THROUGH BUSINESS PLANNING

According to the [InRoad consultation](#), two thirds of respondents considered that business plans are needed and should be included in the eligibility conditions of RI roadmaps. The information gathered from the case study interviews reveals that business planning practices are diverse and often challenging. However, it also highlights that, in addition to the science case of the RI, business plans help create value beyond monetary aspects. As data on users, services, costs and budget change constantly, a sound business plan can facilitate continuous and periodic update and refinement of a RI' strategy. Therefore, business plans are to be understood as a valuable management tool to fulfil the RI' short- and long-term objectives, and not only as an imposed requirement from funding organisations, or as a document exclusive to profit-making organisations. This does not diminish the importance of the scientific case. Rather, the business plan is a supporting document at the managerial level, which ensures the appropriate delivery of RI services.

# 1

**InRoad recommends all RIs to develop a business plan in order to align their strategy, resources and goals and to connect their mission with national and international strategic agendas.**

**The business plan is a relevant tool to align the RI's internal resources with its mission.** The use of specific, measurable, attainable, relevant and timely goals (SMART) is a transparent and effective way to improve performance and impact within a realistic timeframe. Business plans provide an up-to-date framework for informed decision-making by RI managers and funders. Each stage of a RI's lifecycle is linked to a distinct timeframe with specific targets. Thus, when drafting a business plan, it is important to distinguish the short- and long-term strategic goals of the RI, as the inputs and expected outcomes will vary from phase to phase. Therefore, it is highly advisable for RI managers to apply both short- and long-term thinking when drafting each section of a business plan. Moreover, the content of a business plan depends on the stage of development and the type of the RI. The business plan has to reflect the mission of the RI, its specificities (governance structure, scientific field, etc.), and those political, legal and economic aspects that are relevant to its mission. Well thought-out guidelines, therefore, may help RI managers identify the most important aspects of their strategy.



## MINIMAL COMPONENTS OF A RI BUSINESS PLAN

<b>Executive Summary</b>	<ul style="list-style-type: none"><li>- Description of the environment in which the RI will operate and external factors that are important for the achievement of RI goals (political, economic, scientific, technological, legal and economic context, for example the PESTLE<sup>4</sup> analysis).</li></ul>
<b>Mission and value proposition</b>	<ul style="list-style-type: none"><li>- Strategic objectives of the RI;</li><li>- Value proposition: specific benefits the RI will provide to users, as well as its importance for regional, national and European policies and strategic priorities;</li><li>- SWOT analysis<sup>5</sup>.</li></ul>
<b>Governance and management</b>	<ul style="list-style-type: none"><li>- Legal framework and parties involved;</li><li>- Governance structure (e.g. steering board, scientific board, advisory committees);</li><li>- Management (e.g. mandate and responsibilities);</li><li>- Human resources and talent development.</li></ul>
<b>Impact assessment and societal challenges</b>	<ul style="list-style-type: none"><li>- Economic and societal impact assessment, societal challenges addressed and alignment with identified strategic priorities (e.g. Sustainable Development Goals).</li></ul>
<b>User strategy and access policy</b>	<ul style="list-style-type: none"><li>- Market outlook and gap analysis;</li><li>- User segmentation;</li><li>- Products and services offered (service catalogue);</li><li>- Training activities foreseen;</li><li>- User engagement and commercial policy;</li><li>- Access modes and conditions;</li><li>- User fees and associated funding schemes.</li></ul>
<b>Data management plan</b>	<ul style="list-style-type: none"><li>- Data collection, organisation, storage, maintenance and associated costs;</li><li>- Data protection and distribution, implementation of FAIR<sup>6</sup> principles, cyber security;</li><li>- Decommissioning of databases and repositories.</li></ul>
<b>Financial plan and funding framework</b>	<ul style="list-style-type: none"><li>- Description of all present and estimated funding sources, including members financial and in-kind contributions, ESIF (if applicable), project funding, user fees and charities/sponsors;</li><li>- Funding model to be used for the provision of funds of the central hub (e.g. Gross domestic product (GDP) per capita or nominal GDP)</li><li>- Initial and planned investments;</li><li>- Full lifecycle costs, i.e. CAPEX and OPEX separate.<ul style="list-style-type: none"><li>- Capital costs (CAPEX), e.g. construction, implementation,</li></ul></li></ul>

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<sup>4</sup> PESTLE refers to Political, Economic, Social, Scientific/Technological, Legal and Ethical factors that influence the business environment. PESTLE analysis is a widely used tool in management to assess the conditions and environment in which an organisation operates. PESTLE factors are prime determinants of strategic planning and without them organisations might fail to achieve the desired goals.

<sup>5</sup> The SWOT analysis outlines the RI's strengths, weaknesses, opportunities and threats.

<sup>6</sup> Findability, accessibility, interoperability and reusability.



	<ul style="list-style-type: none"> <li>upgrades and decommissioning.</li> <li>- Operational costs (OPEX), e.g. full annual costs of operation of the facility (ies), e.g. personnel, rent of building space, office expenditure, travelling, meetings, miscellaneous.</li> <li>- Contingency plan, including a reserved budget to cover potential financial or unforeseen risks.</li> </ul>
<b>Stakeholder engagement strategy</b>	<ul style="list-style-type: none"> <li>- Stakeholder analysis and stakeholder engagement plan to attract and retain the interest of current and potential stakeholders of the RI;</li> <li>- Partnership strategy.</li> </ul>
<b>Communication and outreach</b>	<ul style="list-style-type: none"> <li>- Communication plan, describing the channels deployed to convey the added-value of RI activities for science and society.</li> </ul>
<b>Implementation, monitoring and risk management</b>	<ul style="list-style-type: none"> <li>- Activity plan and milestones throughout RI lifecycle, including upgrade and decommissioning;</li> <li>- Internal performance monitoring, KPIs;</li> <li>- Risk management plan: identification and analysis of risks and mitigation strategy;</li> <li>- Liabilities including those associated to the maintenance of databases and repositories, even when the RI is no longer in operation.</li> </ul>
<b>Ethical and regulatory aspects</b>	<ul style="list-style-type: none"> <li>- Ethical and regulatory issues related to the scientific strategy and activities of the RI, e.g. evaluation programmes, procedures, documents, etc.</li> </ul>
<b>Intellectual Property Rights (IPR) management</b>	<ul style="list-style-type: none"> <li>- Foreseen Intellectual Property (IP) assets to be owned by the RI;</li> <li>- IPR policy and strategy;</li> <li>- IPR protection plan.</li> </ul>

A relevant point mentioned during the case study interviews is that while the widening of membership and strengthening of partner involvement are generally perceived as important for the long-term sustainability of the RI, **bringing added value to the user communities is fundamental**. In this respect, InRoad encourages careful consideration to the questions listed below when defining the mission and value proposition of the RI:

- Who is the RI serving?
- What do users need?
- How to engage with users effectively?
- How to position RI services?

Moreover, when designing the value proposition, **RIIs are strongly encouraged to take into account the relevant external developments, in particular the national strategic agendas for science, technology and innovation in their research domain, in order to align their mission with the policy level**. Conversely, it is highly advisable that RI funders take into account the national strategic agendas when evaluating RI projects.



**Good practice 1: Linking business plans with national strategic agendas.** More than 70 stakeholders in the Netherlands (including universities, foundations, industry, insurance companies, RIs, and patient organisations) have committed to a nationwide initiative for personalised medicine. This bottom-up initiative stems from the national communities' desire to work together to defragment the health system in the Netherlands, as there is a general belief that there is room for further efficiency. This self-organising system seeks to integrate all efforts and capacities to connect their mission with national strategic agendas through an ambitious yet realistic business plan<sup>7</sup> that will assemble all stakeholders and create a sustainable infrastructure that will facilitate world-class personalised medicine & health research in the Netherlands.

**Good practice 2: Alignment of RI needs and investments with national strategic priorities.** The RCN publishes national strategic priorities in different domains, the so-called 'national priority areas', in the Norwegian Roadmap for RIs. The strategic areas contain research objectives, existing RIs and possible future needs for infrastructures in various thematic areas, disciplines and technology areas. They are revised on a regular basis in response to changes in national priorities and needs specified by the research institutions. Thus, RIs applying for funding are aware of the identified national strategic priorities against which their proposals are assessed and prioritised, within their respective fields of research.

RI roadmap applications provide input to the RCN's analysis of national infrastructure needs and investments made, which makes the RCN better equipped to set strategic priorities and to target funding announcements towards specific thematic areas. This combination of top-down and bottom-up processes is an example of how integration of RIs in the national strategic research priorities can be supported.

## SHORT- AND LONG-TERM FINANCIAL FORECASTING FOR ROBUST RI GROWTH

Despite the complexity of gathering **annual and lifecycle cost data**, the benefits of financial forecasting for RI evaluation in the frame of the national roadmap and for RI business planning have already been demonstrated in some cases.

**Good practice 3: Annual RI full cost calculation promoted at the national level.** Support measures aimed at implementing RI annual full cost calculations were initiated in 2011 by the French Ministry of Higher Education, Research and Innovation through a pilot project involving several large RIs, which was carried out in collaboration with a consulting agency. The methodology for cost calculation was subsequently optimised. Since 2016, this annual full cost calculation is part of the national RI roadmap update. All RIs included in the national roadmap are expected to submit such calculations. Representatives from EMBRC France confirmed that this exercise was very beneficial for their financial planning, as it helped ministerial representatives to better assess national nodes' contributions to distributed European RIs, and to collect additional information for negotiations on France's participation. Additionally, it has also helped the Ministry to optimise their KPIs for RI evaluation. For example,

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<sup>7</sup> Health-RI (2017), <https://www.health-ri.org/health-ri-business-plan>



*the impact of RI participation in EU FP projects and other European initiatives can be better taken into account.*

Another practice highlighted in one of the case studies shows the requirement for roadmap applications of separate cost estimates and funding sources throughout the implementation phase and for the first 10-years period running the RI. Overall, a gradual move towards the collection of annual full costs and the identification of the funding resources for all distributed RIs (including nodes) would be a desirable achievement in the mid- to long-term but is perceived as a real challenge to implement.

In addition to compulsory monetary contributions, many European RIs rely on in-kind contributions from nodes and partner institutions. As a matter of fact, in-kind contributions from members are seen as an important asset and need to be reliably evaluated. Therefore, an **in-kind contribution valuation methodology** is an important and complex area that requires improvement in the short-term. InRoad advises stakeholders to foster the necessary dialogue and to also consider measures to support national RIs in the development of such methodologies.

Furthermore, long-term sustainability requires sound **risk management**. The feedback obtained from the interviews revealed that not all RIs have adequately protected themselves from an emergency scenario by setting aside a contingency budget. Although some of them have laid down in their statutes that in the event of financial risk a member's liability shall be limited to its respective yearly contribution, it is still unclear for some ERICs whether a member's annual financial contribution could be used to cover potential financial risks straight away. The reason behind this is that public funds may be used only for the purpose(s) for which the EU MS or AC's parliament appropriated them. It is therefore advisable for the governing bodies of RIs to discuss whether the establishment of an ex-ante financial provision, i.e. a credit reserve guarantee mechanism, is needed to cover any potential financial risks.

**Good practice 4: Planning a risk budget.** *In its 2015 financial plan, the Dutch node of BBMRI included a budget reservation to cover potential risks. Such funds were foreseen for unexpected expenses, such as the bridging of new funding to keep services running at the node level or the start of a new activity. The budget reservation was used in 2017 while waiting for the next national roadmap call and other funding opportunities. No formula was applied to calculate it, but according to the node's coordinator, the reservation amounted to approximately 5% of the total budget.*

Furthermore, adjustments to the risk management strategy are necessary when transitioning from one phase to the other. To help deal with uncertainty and mitigate potential financial and managerial risks during both phases, scenario building, KPIs and milestones are helpful tools to set expectations and priorities, as well as to monitor progress in a transparent and factual way.

## ALIGNMENT OF CENTRAL-LEVEL AND NODE BUSINESS PLANS TO REFLECT COHERENT STRATEGIES IN DISTRIBUTED PAN-EUROPEAN RIs

To achieve a greater coordination and reduce fragmentation, it is important for all members of distributed RIs – including national nodes and central hubs of international RIs – to have interlinked business plans. The feedback from the case studies' participants shows that central business plans in European distributed RIs are expected to serve as an overall framework to



steer the nodes' strategies in the same direction, guiding the specialisation of nodes, and enabling the implementation of quality assurance across the whole distributed RI.

When drafting the node's business plan, it is important to take into account the local political and economic conditions, relations with regional authorities and to align its strategy with the national strategic agenda. Furthermore, InRoad recommends the inclusion of aspects that are not covered in detail in the central business plan, such as: the coordination of participating facilities at the national node level, the overarching governance of the national network of facilities and centres, the development of the physical infrastructure, associated investments and human resources, and the portfolio of services offered by those facilities and centres.

**Good practice 5: Integrated business plans at hub and node level.** *The managers of the French node of EMBRC are currently considering drafting a business plan in view of the next funding application. Although having a business plan is not yet an official requirement from the funder, the node's managers believe that having a sound business plan is indispensable to justify future long-term financial needs. While the business plan at the central level has been recently updated, reflecting the overarching strategy of the distributed RI as a whole, it still does not go into detail with each node's strategic planning needs.*

Performing business planning at the national node level would also help define the **financial and operational perimeter of the RI**, and to distinguish RI services and activities from other institutional activities.

According to Validation Workshop participants, it is not a desirable strategy to compose a RI central-level business plan (e.g. for ERICs) by simply aggregating the individual nodes' business plans / business cases. Even in cases where national nodes have drafted business plans of their own prior to joining the pan-European distributed RI, it is highly advisable for those nodes (or consortium partners in the preparatory phase) to be involved in defining a coherent business plan for the pan-European RI, from the early stages of its development.

While business planning is essential, it places an additional burden on the nodes, especially when there is a lack of dedicated managerial staff. One solution to this bottleneck could be that central hub managers prepare a business plan template to be adopted by the General Assembly and used by the individual nodes.

## PROFESSIONALISATION OF BUSINESS PLAN DRAFTING AND IMPLEMENTATION

In many cases, it appeared that solid business and management expertise was lacking in business plan drafting. Based also on the information gathered during the Validation Workshop, there is a need to increase the professionalisation of administrative, financial and other strategic RI activities. Thus, when appropriate, the use of external services such as consultancies, management or communication specialists with a solid understanding of the needs of RIs can help increase the quality of certain activities and improve RIs visibility. Regarding business planning in particular, it is important that consultants understand the specificities of RIs and their services. Consultants could be hired to perform market analyses, develop communication and/or commercial strategies and draft business plans.

Nevertheless, InRoad recommends that the main focus be placed on the development of internal expertise for RI management, and **encourages the development of human resources strategies to attract and retain personnel with managerial, including financial, experience.**



Additionally, science and management professionals, with separate mandates ('double-headed management structure'), are of equal importance to run RIs. Indeed, the management of RIs requires a balanced combination of both scientific and managerial expertise to effectively execute the business plan and the RI's day-to-day management activities. To support this, funding organisations and host institutions at national and European level are advised to limit formal obstacles in their procedures for hiring and retaining RI professional managers. RIs, on the other hand, are advised to design talent management schemes in their business plans in order to justify human resource needs and associated costs.

**Good practice 6: Double-headed management structure.** *As stated in its internal governance documents, the management structure of the European XFEL is composed of at least two managing directors; one of which is required to be a scientist and the other one an administrative director. The appointment and division of responsibilities of the two managing directors is established by the council in the rules of procedure for the management board and the by-laws in the guidelines for selection and appointment of directors.*



## BUSINESS PLAN AS A REFERENCE FOR THE DEVELOPMENT OF OTHER MORE OPERATIONAL DOCUMENTS

# 2

**InRoad recommends the use of the business plan as a management tool, in the form of a living document aimed at ensuring the long-term sustainability of the RI.**

Long-term sustainability is an issue that raises concern among RI managers. State-of-the-art research facilities require stable and predictable funding frameworks to excel, and also effective management systems in place to execute their strategy with a long-term perspective.

Each of the aforementioned business plan components must be described in a short and concise manner, using diagrams and tables whenever applicable. Separate business plan sections can then be (and, in many cases, are) developed into separate, more comprehensive operational documents, such as Socio-Economic Impact Assessment, Access policy, Data management plan, Financial plan, Communication, Implementation plan. The business plan is also often used as a basis for drafting an Annual Work Programme. A concise business plan would facilitate their use as management tools and serve as a regularly updated reference document. Therefore, InRoad recommends using the business plan as a reference for the development of those documents.

**Good practice 7: RI business plans as a reference point for other operational documents.** *The initial business plan of ECCSEL ERIC<sup>8</sup>, a pan-European distributed RI in the field of Energy, was drafted and reviewed in the preparatory phase, updated during the implementation phase, and then used by the ERIC to develop the operational plan to be implemented also by the RI nodes. In quite a few areas the nodes use the business plan for the day-to-day management, using specific sections, e.g. for handling routines or as a reference to point out the direction in which they should develop. An important part of the business plan for this RI is the infrastructure investment plan for future investments, used directly by the central hub for planning.*

## USAGE AND PERIODIC UPDATE OF THE BUSINESS PLAN THROUGHOUT THE ENTIRE RI LIFECYCLE

It is important to note that business plans are living documents. Hence, reviewing them on a regular basis is beneficial to assess whether the RI' strategy is still in line with the initial objectives, or whether further adjustments are needed to meet them.

Successful engagement with existing and potential user communities is seen as a key factor to ensure the operational sustainability of the RI. A description of the potential user communities during the preparatory phase is as important as performing an updated **analysis of the user segments** throughout the RI's lifecycle.

<sup>8</sup> ECCSEL ERIC: European Carbon Dioxide Capture and Storage Laboratory Infrastructure  
<http://www.eccsel.org/>



Other important elements of continuous business planning are **monitoring mechanisms**. These are not only vital to ensure a constant flow of information among all relevant parties, but also to achieve greater organisational efficiency. KPIs, when appropriately used, can be a valuable tool to help retain focus on objectives and to better understand the factors involved in achieving them (or, conversely, in failing to achieve them). At the same time, relying on them as a single measure of success can distort the way in which the RI performs and how its performance is perceived. Therefore, it is advisable to combine their use with additional measures, such as regular meetings, periodic internal reports or feedback from external stakeholders.

For distributed RIs, KPIs developed centrally and adapted to meet specific node needs make it possible to supervise operational progress. Understanding KPIs and selecting those that are best suited to track performance is viewed as highly important by some of the interviewees. Furthermore, as funding for science in Europe comes under pressure to show what recent investments have returned, InRoad encourages RI managers to strive to gather evidence and not to see KPIs as a threat to the RI, but as an opportunity to demonstrate the value that their services bring to science, society and the economy. In particular, large-scale facilities with financial and in-kind contributions from various international stakeholders have a duty to collect such metrics to help funders understand the Return on Investment (RoI). However, different RIs might use different metrics in accordance with their type and scientific field.

**Good practice 8: KPIs for monitoring short- and long-term performance.** *ECCSEL started developing KPIs during its preparatory phase in order to measure its short-term performance. After two years of implementation, the RI applied for the ERIC status and included additional KPIs in the application. Now that ECCSEL ERIC is in operation, the central hub is preparing the monitoring of short-term KPIs on a running basis, gathering online reports from the facilities (e.g. on facility usage). The intention is that parts of the KPIs are also used by the nodes to monitor their own performance at the national level. And currently, at the ERIC central-level new KPIs to measure long-term performance are being developed, e.g. KPIs to track the closing of technology gaps.*



### **3 InRoad recommends early and continuous stakeholder involvement for the development, implementation and updating of a sound business plan.**

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The feedback obtained from some of the case study interviews shows that an early and continued involvement of all stakeholders is vital for the RI's long-term sustainability. Some respondents from the case studies pointed out that the involvement of users and other direct stakeholders, in particular host institutions, in the design of the business plan and in subsequent updates can be useful to obtain feedback, direction and commitment for the long-term RI strategy. This will also allow the alignment of the RI business plan with the institutional research agenda and institutional strategic priorities.

**Good practice 9: Involvement of stakeholders in the development of the RI business plan.** *EMBRC is a European distributed infrastructure with nodes that are located and firmly rooted in peripheral maritime regions. The local authorities and innovation networks in these maritime regions are part of the governance of EMBRC and have been actively involved from an early stage in the RI business model development. This is especially important for the RI, as regional financial support has been and continues to be an important factor for its long-term sustainability.*

## BUSINESS PLANS AS A REQUIREMENT IN NATIONAL RI ROADMAP AND FUNDING APPLICATIONS AND AS AN EVALUATION CRITERION

The requirement from funders and policymakers of a business plan for RI roadmap and funding applications can lead to a greater understanding of the importance of business plans throughout all stages of the RI lifecycle and help further develop a management culture adapted to scientific communities. **InRoad underlines that comprehensive business plans are an essential criterion especially when the roadmap evaluation is linked to funding decisions.** Under special circumstances, in cases when the RI project is still in its early stages of development (e.g. design phase), presenting a business case instead of a full business plan can be deemed sufficient.

Regardless of whether they belong to a pan-European or a national RI, all applicants of national RI calls for proposals are encouraged to submit a business plan to the national roadmap and funding applications. In that respect, support measures to improve business plan preparation could be considered. National policy makers and funders are therefore invited to reflect on essential elements of the RI business plan, as described in recommendation 8. InRoad encourages funding organisations to promote business planning expertise within their organisations – or to involve external experts – in order to reinforce the assessment of RI business plans in their roadmap and funding procedures.

To support this, a pool of international experts comprised of individuals with business management experience, scientific expertise and an understanding of RI development and operation could be developed, either at the national level or through joint efforts of national funding agencies and ministries. The involvement of international expert panels is already in place in



some national RI evaluation procedures, although those experts are mainly involved in the science case assessment. When the science case and the business case are brought together for an integral assessment of the RI application, it would be beneficial for the international panel to involve expertise on business planning.

## DEVELOPMENT OF TRAINING SCHEMES, EXCHANGE OF PRACTICES AND MUTUAL LEARNING EXERCISES

The analysis carried out by InRoad shows that support measures for RI managers can facilitate the exchange of good practices and support coordination. At the European level, different fora (ERIC forum, LEAPS initiative, EIROforum, e-IRG) as well as ESFRI already provide platforms for discussions and sharing of experience.

Regarding training activities to improve the professionalisation of RI management, the RItrain project and the corresponding [EMMRI](#) programme are excellent initiatives, which respond to an actual demand and therefore enjoy great popularity. **InRoad calls for a broader offer and extension of training opportunities backed by R&I framework programme funding and other sources.**

Moreover, it was suggested by some of the Validation Workshop participants to create a pool of experts at the European level, so that RI managers can turn to them for advice. This action could be promoted by strategic RI bodies, such as ESFRI or the Science Europe Working Group on RIs and possibly implemented by funding organisations.

**Good practice 10: Exchange of practices and mutual learning.** *National research councils and other funding organisations could have a role in providing support to applicants for RI roadmap funding to exchange practices and learn from existing RI business planning. The RCN organises at least every second year workshops for RI managers. In these workshops, they have the opportunity to exchange about business planning, discussing best practices, challenges they face and learn from each other.*



## CONCLUSION

The insights gathered throughout these past 24 months show that national funding organisations and RI managers consider business planning instrumental for different purposes. From the RI managers' perspective, business plan makes the RI more transparent, efficient and accountable, and from the funding organisations' perspective, it facilitates decision-making in national competitive roadmapping and funding processes.

However, this process is still perceived as challenging, and business plans are not yet universally implemented in RIs, or used in roadmapping and funding processes.

We sincerely hope that InRoad's recommendations will contribute significantly to raising awareness about the importance of RIs business plan drafting, assessment and implementation, as well as the challenges associated with those processes. InRoad strived to provide a solid framework to concretely help RI managers achieve these.

We further hope that policy-makers and funders will build upon our recommendations to better take into account RI business plans in their decision-making processes.

Finally, we call upon relevant RI fora and high-level policy bodies to take up these policy insights and translate them into concrete measures to sustain a wider use of business plans in the whole RI ecosystem.

