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Evaluation of the impact of the "Aid for Reindustrialisation (ARI)"

**Summary of the evaluation conducted for
Bpifrance**



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1 Context, objectives, method, and scope of the evaluation

1.1 Background of the ARI aid

1.1.1 Creation of the ARI in 2009

Resulting from the General Industry Forum (*Etats Généraux de l'industrie*) in 2009, the Aid for Reindustrialisation (*Aide à la réindustrialisation in French*, referred to as ARI scheme) was launched within the framework of the Investments for the Future Programme (*Programme d'investissements d'avenir*, PIA in French). It should be recalled that the Investments for the Future Programme was initiated by the Government in 2009 and adopted by the Amending Finance Act of 9 March 2010. It aimed to improve the growth and employment potential of the French economy by financing innovative and promising investments in the country, with a « co-financing » principle for each project. With a budget of nearly €57 billion, the Investments for the Future Programme, steered by the General Secretariat for Investment (SGPI in French), is made up of various actions implemented by public operators, including the ARI scheme operated by Bpifrance.

This action falls precisely within the framework of investment promotion, the development of competitive production capacities and the creation of sustainable jobs.

The ARI scheme was set up in order to cope with the decline of industry in the national GDP, and the consequent destruction of industrial jobs. The **aid, a reimbursable loan with no interest or guarantee, is repayable over seven years, including a two-year grace period**. Originally, this measure, with a total of €320 million in repayable advances, was intended to generate more than €700 million in new investments and the creation of 3,000 jobs.

1.1.2 A system officially deployed as of 10 July 2010

Managed by the Ministry in charge of Industry, in partnership with the National Agency for Territorial Cohesion (ANCT), the processing of aid applications is carried out by the Interministerial Commission for Aid to Business Location, for which the ANCT provides the secretariat. The French State has entrusted Bpifrance with the following missions:

- to contribute to the promotion of the scheme among companies, within the framework of its day-to-day interactions with them, as part of its own interventions;
- to grant aid, in the name and at the risk of the French State, from the specific resources of the ARI scheme and decided within the framework of article 8 of the amended finance law for 2010 (2010/237 of 9 March 2010) relating to the Investments for the Future programme.

This mechanism was set up under the Agreement between the French State and Bpifrance (formerly OSEO), dated 8th of July 2010.

1.1.3 Implementation procedures amended in 2016

Initially launched to support capital-intensive and structuring projects for territories, a second component was set up in 2014 with different specifications to support the growth of SMEs.



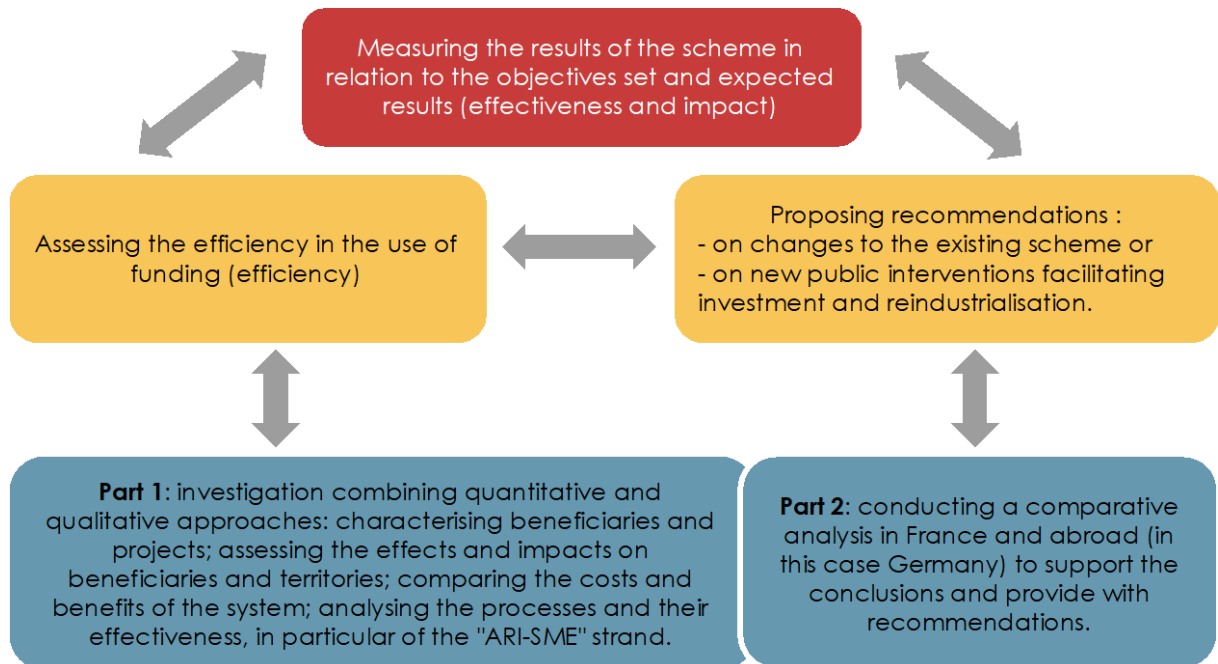
ARI two strands gathered in unique terms of reference on 2016



At the beginning of 2016, the two branches, which previously governed the components of the ARI, were combined in a single, more readable document available on the website of the Directorate General for Enterprise (DGE in French). Only companies whose main activity is in the 'manufacturing industry' section of the French nomenclature of activities (NAF) are eligible. Moreover, their Banque de France credit rating must not be equal to or lower than 6 (ranging from an excellent to a very weak rating).

1.2 Objectives of the evaluation

An evaluation with three general objectives and several specific objectives presented in two parts:





1.3 Evaluation questions and evaluation tools used

Evaluation questions	Tools mobilised to answer the questions
Q1. What are the effects and impacts of the scheme on French industry? And on the territories?	All analyses, including a campaign of 18 interviews with the instructor services, sectoral referents and the operators (DGE and Bpifrance)
Q2. What are the characteristics of the beneficiary projects and the companies initiating these projects?	A mapping of the profile of beneficiaries and a typology of projects based on the data collection and consolidation work carried out by Bpifrance
Q3. What is the typical profile of the ARI beneficiary?	Beneficiary survey and interviews (qualitative analysis): online survey conducted with around 30 beneficiaries between July and September 2019, in-depth telephone interviews conducted with around 20 beneficiaries between July and September 2019
Q4. What are the impacts of these projects on the activity of the companies initiating the project and on employment (bearing in mind that jobs must be maintained 3 to 5 years after the end of the projects)?	Statistical analysis based on data provided by Bpifrance and supplemented by other sources (Trendéo, DIANE+)
Q5. What are the impacts of ARI-funded projects regarding industrial and commercial aspects?	"Before-after" estimator on the financed companies' indicators = more quantitative component Linear estimate of leverage
Q6. What are the quantitative and qualitative impacts of the scheme on the structuring and competitiveness of industrial sectors?	Elements of ex-post analysis previously carried out by the DGE
Q7. How efficient is the scheme?	Cost-Benefit Analyses
Q8. What are the positive and negative externalities of the projects?	Beneficiary survey and interviews (qualitative analysis)
Q9. What are the positive and negative consequences of the scheme for the private sector, the beneficiary companies and the territories?	
Q10. What are the modalities of implementation of the scheme to be renewed or amended?	



1.4 A study focused on 122 investment projects

An extensive work to consolidate data on investment projects transmitted by Bpifrance and to clarify the scope of the study led to the analysis of 122 investment projects (out of a total of 135) (data as of May 2019). This difference is explained by the fact that all aid cancelled (including those cancelled at the request of beneficiaries) or non-contractualised in May 2019, and therefore not actually paid out, was excluded from the scope of the study. The 122 applications represented €284 million in commitments (89% of the €320 million planned), with 10 projects accounting for the bulk of funding (nearly 60% of the total amount committed). The impact study includes 53 achieved or completed projects, of which 16 projects outside the French State-Bpifrance agreement, eight of which are not industrial projects.

Focus on KEM ONE's investment project:

The ARI scheme has concentrated a significant part of its resources on the project presented by the chemical group KEM ONE (€80m, i.e., 20.5% of the initial budget of €320m). Validated by the Minister of Industry in August 2015, this project was completed in December 2017. Combined with a €15 million grant, this loan enabled the industrialist to invest €161 million and to take part in a more global investment plan of €250 million between 2014 and 2016.

While the company was in great difficulty in 2013, this investment plan enabled it to modernise its equipment and facilities, becoming "an example of French industrial renewal". Thanks to this investment, the company recorded excellent results in the following years, and the ARI loan was repaid early.

As proof of this success and the company's good health, management is planning a new €300 million investment plan between 2018 and 2022, partly financed by the European Investment Bank (€50 million). As a project outside of the agreement, no job creation target had been set in this case.

2 Summary of conclusions

2.1 Beneficiaries mostly corresponding to the initial objectives of the ARI scheme

2.1.1 Description of the ARI "growth and development" and ARI "excellence" projects

Overall and in accordance with the agreement, small and medium enterprises (SMEs) represent most of the companies supported (68 investment projects) and 35% of total commitments (€70.6 million), more particularly in the sector of "Manufacture of metal products, except machinery and equipment" (NAF rev.2 25 nomenclature).

The data available made it possible to identify two types of projects supported by ARI:

- **ARI "growth and development" projects:** in this case, the aid contributed to the financing of 41 investment projects (carried exclusively by SMEs) for a total committed amount of €20 million, 9 of these projects were carried out by companies in the "Manufacture of metal products, except machinery and equipment" sector, which is the most represented with 22.5% of the total amount of commitments (€4.5 million);
- **ARI "excellence" projects:** in this second case, the aid helped finance 65 investment projects for a total amount committed of €129.6 million, 37 of which were carried by mid-caps. The "metal products manufacturing" sector is also the most represented here, with 8 projects carried out by mid-caps operating in this sector (€36.11m, i.e., 27.8% of the total). While the average amount committed is €1.4m (and a median amount of €1.6m), these projects are better endowed with an average of €3.5m (and a median amount of €1.65m,



implying that the average amount in this sector is carried by few projects with large amounts committed).

The objective of supporting SMEs and mid-caps has therefore been achieved overall: only 3 large company investment projects have been supported by the scheme, including one project outside the agreement. The corresponding amount committed represents 12% of the total amount of commitments (€24.75 million).

2.1.2 *A good diversity of objectives for the projects, in line with the French State-Bpifrance agreement requirements*

The lessons learned from the online survey conducted (31 respondents of which more than two thirds have completed or closed their project) and the 20 telephone interviews have highlighted the diversity of the investment projects' objectives:

- projects aimed at extending production capacity (the overwhelming majority of projects) and responding to an increase in sales orders;
- projects aimed at restoring the competitiveness of the site or developing the productivity of the establishment;
- projects to industrialise innovations or to improve employee skills;
- projects aimed at penetrating new markets;
- turnaround projects: these investment projects, aimed at repositioning the company on buoyant markets, coupled with financial restructuring, are very limited in the portfolio of establishments studied. Only the Kem One and Gascogne projects appear to be real turnaround projects.

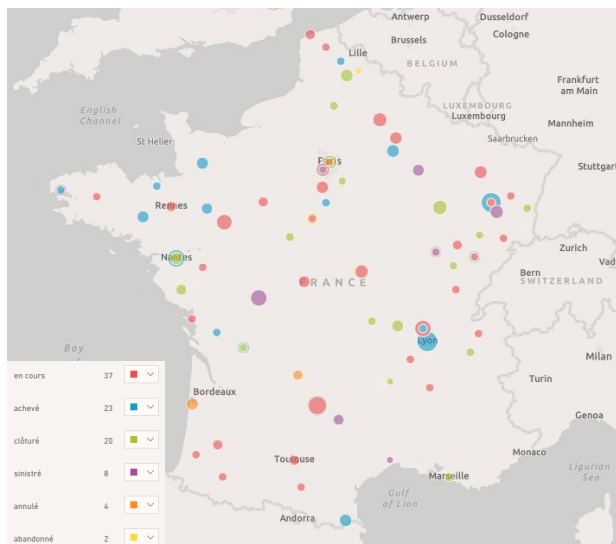
Only two business relocation projects could be identified.

The scheme, in accordance with the French State-Bpifrance agreement, is open to very different types of projects. The diversity of the projects objectives raises the question of the lack of truly strategic axes of the ARI Scheme.

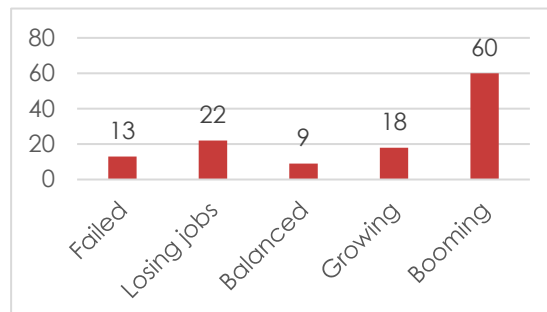
2.1.3 *A geographically balanced distribution of supported projects*

According to the agreement between the French State and Bpifrance (formerly Oséo), the ARIs were particularly aimed at revitalising areas losing jobs. The 122 projects studied are spread throughout France, whatever the project's progress, with a slight concentration of projects observed in the industrial regions of Lyon up to Nancy. Less than a third of the projects supported were identified in an area where job losses is acknowledged.

Location of approved projects



Breakdown of supported projects according to the French State of the employment area in the year the ARI aid is granted



The 'job renewal rate' was used as an indicator to assess the dynamism of a sector or territory at a given time (the year of allocation). This ratio indicates the number of jobs created in a given sector or territory for every 100 jobs lost.

Source: Data from Bpifrance, DGE, and Trendeo, processed by Technopolis and Trendeo.

2.1.4 The supported firms have a lower capacity to meet their financial commitments over a period of one to three years, compared to average listed firms

A comparative analysis of the Banque de France rating (credit rating) of ARI beneficiary institutions at the date of signature of the aid grant compared to the rating of the entire population of French companies in 2013 and 2018 reveals **several observations in line with the objectives of the system:**

- The ARI system has mainly supported institutions with a credit rating of 4+ or higher, particularly over the 2010-2013 period, i.e., a profile of institutions with lower capacities to honour financial commitments over a period of one to three years;
- This observation is made in a context marked by a slight change in the rating profile of all institutions between 2013 and 2018.

2.2 Analysis of results in relation to the objectives and expected results

2.2.1 A highly structuring scheme

The scheme is based on the identification of relevant projects through local and regional public actors. It enables the DIRECCTE¹ network to take part in the financial rounds of companies' projects. The identification of projects likely to apply for the ARI scheme is carried out through several channels and varies according to the region. The ARI scheme has thus enabled the DIRECCTE network (before the reorganisation of the decentralised State in the regions) to provide customised support to certain companies. Although it was not an initial objective, it

¹ Regional Directorate for firms, competition, consumption, work and employment. The DIRECCTE represent the interventions of the central French State at the regional level.



also enabled the network to participate **in partnerships with other funders, particularly the Regional authorities.**

More generally, several interviewees underlined the fact that **ARI participates in the creation of a climate of trust for foreign investors** due to the provision by the French State and the Regions of a range of diversified tools to support industrial companies.

2.2.2 A significant knock-on effect for investors, particularly thanks to State support (posters, label effect, etc.).

Although the ARI aid was a **triggering factor in raising banking funds** to carry out investment and developing projects with greater ambition, it had no effect on the initial investment decision.

All the interviews conducted highlighted the fact that the scheme allows for the **consolidation of applications and thus facilitates the overall decision to finance the investment** (company, bank, public co-financers, etc.).

It has a leverage effect which serves to cross a milestone with financial partners, who would otherwise be cautious and require other financing to secure the business model of the investment project. This is especially relevant in the case of "Excellence" ARIs scheme.

2.2.3 A positive economic evolution for beneficiaries who have completed their projects

The econometric analysis of the impacts of the ARI on beneficiary establishments still existing to date was conducted on the basis of four economic indicators (turnover, total exports, value added and number of employees (headcount)). Overall, the population of ARI beneficiaries is characterised by positive and sustained growth trends in the 4 indicators studied (irrespective of the type of ARI scheme or the status of the project: closed, completed/, ongoing). This is especially true for completed and closed ARI projects. The analysis highlights a classic evolution of beneficiary institutions having completed their investment project: development of production capacity, added value, turnover and employment.

As there is no control group composed of non-ARI beneficiary companies similar to the beneficiaries, the changes in the dynamics of the four indicators can only be partially attributed to the scheme.

Nevertheless, the results of the analysis reveal a common evolution of the indicators of the beneficiary enterprises within the same period of time in a statistically significant manner, while controlling for systematic differences between enterprises (category of enterprise, sector, age), and annual effects that can be observed.

Synthesis of econometric analyses of the impacts of the ARI

- Over the period 2010-2017, a comparative analysis of the average annual growth rates of the indicators of ARI beneficiaries with those of all companies in the manufacturing sector shows that, at the end of the period under study, the growth rate of turnover, VA and headcount is much higher than the average for companies in the sector. For example, the turnover of ARI beneficiaries increased by 17% between 2016 and 2017 compared to 6% for the manufacturing sector as a whole.
- As an indication, these positive trends can also be illustrated by some key volume figures calculated between the year before the signing of the ARI agreement and two years after it was signed: the turnover of ARI beneficiaries is on average €18,996,000 higher, the number of employees increased more strongly than the average for French companies in the

manufacturing industry (an increase of 42 individuals), and the volume of exports increased by an average of €11,156,000.

2.2.4 *A limited impact of ARI scheme in shifting the deindustrialisation trend*

The impacts of the ARI in modifying the deindustrialisation trajectory are limited, as exemplified by the number of projects concerned. However, it can be seen from the closed files that the jobs created are in line with what was agreed at the outset. According to the results of the interviews, the job creation target set by the ARI scheme has been exceeded by some ten respondents to the questionnaire, although this is not directly attributable to the ARI scheme.

For half of the interview respondents, the ARI-supported investment project provided an opportunity to train employees in new production methods (about ten cases). A few cases of training conducting to graduation were also observed. In several cases, investigation revealed a preference for beneficiaries to renounce to the last instalments of the ARI funding rather than hiring permanent contracts. These recruitments appear to be premature in their development project (about ten such cases emerged from the telephone interviews). While this type of decision reassures beneficiaries about their recruitment strategy, since they prefer to give up the aid rather than recruit too early in their development plan for the sole reason of reaching the number of jobs created under the agreement, it raises questions about the usefulness of the scheme.

Finally, **the effects on the revitalisation of the affected industrial sectors appear to be relatively minor.** Nevertheless, in two cases, the scheme has contributed to this type of revitalisation: the 'wood' sector in Brittany region and the 'cork' sector in the Var department. Indeed, before the support provided by the ARI, these sectors no longer had any large-scale companies likely to revitalise economic activity in their territories (source: interviews with the 'single investment referents'² and beneficiaries).

2.3 Summary of the analyses of the efficiency of the system

2.3.1 *Targets for investment and job creation largely achieved, despite losses*

From a general point of view, there is a **significant leverage effect** of the ARI scheme, especially on so-called defensive projects (aimed at limiting deindustrialisation). The ARI has indeed supported investment projects for companies that were temporarily in an economically fragile situation, and enabled funding rounds to be completed.

Overall, **the objectives should be largely achieved in terms of overall investment despite significant losses.** The scheme has a **leverage effect of more than 5 in terms of investment** (a result that remains to be confirmed for all the projects still in progress).

In terms of jobs created, the objective should also eventually reach a ratio of 1.6 times the target, as planned and materialised in the agreements signed.

For the 53 completed and closed projects, 1 815 jobs have already been created. Considering that the number of jobs actually created is significantly higher than provided for in the agreements, it can be estimated that 2 258 jobs are expected to be created for the completed

² Référénts Uniques à l'Investissement: Civil servants for the Ministry of economy in charge of supporting large scale strategic investments.



investment projects, which would represent 75% of the 3 000 jobs planned for the entire ARI scheme (all projects combined: abandoned/completed/completed/in progress/in progress).

It is also estimated that 4 887 jobs should be created with regards to projects still in progress or to come.

However, the ARI scheme recorded losses amounting to €46.7m, i.e. 16% of total commitments (compared, for example, to the loss rate of more than 25% in the case of the National Fund for Territories Revitalisation³). This relatively low rate for ARI at this stage does not, however, take into account the cases still in progress and not yet reimbursed and the €18.5 million still to be committed.

Losses concentrated on a limited number of projects

Three projects account for 67% of the losses: the Petroplus project, outside the agreement (€20m loss), the Loiselet project (€6.5m) and the MPO project (€4.7m).

Although it is difficult to estimate the total amount of losses to date, it is anticipated, with regard to current and future projects benefiting from the remaining €18.5 million, that this rate should eventually be between 15 and 20% maximum. This rate is well below the average hypothesis adopted by Bpifrance of 50% default (which nonetheless relates to schemes of a very different nature from the ARI (innovation projects, etc.)).

2.3.2 A zero-interest aid scheme that is all the more attractive and efficient when market interest rates are high

All of the investigations lead to the conclusion that the **zero-interest aid scheme** with deferred repayment **has generally achieved its objectives before 2014, when market interest rates were high**. In other words, the ARI scheme achieves its objectives of limiting deindustrialisation more effectively in times of economic crisis.

Conversely, from 2014 to date, for most beneficiaries surveyed, bank loans were an alternative to the mobilisation of ARI because of the fall in interest rates.

During this second period, the very relevance of the scheme was questioned on numerous occasions for two reasons: the current context of low bank interest rates, and the obligation for beneficiary institutions to disburse before receiving public aid.

³ Fonds National de Revitalisation des Territoires



3 Lessons learned and possible avenues for development

Lessons learned and recommendations for the evolution of the ARI scheme are summarised in the following table. They are organised around three sets of findings.

<p>Finding 1: a good initial strategic reflection on the (broad) objectives of the scheme, the parameters and conditions of intervention in view of the economic situation at the beginning of the 2010's</p>	<p>Lessons learned: better target the objectives of this financial tool, in relation to the needs identified in the field and by ensuring the scheme's capacity to adapt.</p>
<ul style="list-style-type: none"> • The ARI is a financial instrument to support cyclically fragile enterprises, mainly SMEs and mid-caps, providing a repayable advance with a grace period, useful in the post-crisis situation of the early 2010's, and directly mobilizable by state services; there are no systemic changes as in other Investments for the Future Programme schemes, but this was not the objective either. • In 2010, there was no supply of development loans. It was therefore necessary to cover the needs of enterprises to a large extent. • The ARI scheme is considered "defensive" as it aims to limit deindustrialisation. It is not a massive scheme, set up in a particular context, which has achieved its investment and employment objectives overall. • The device was misnamed: it intervened above all on the increase of productive capacities and less on the reindustrialisation or the turnaround of companies in France. • The overall feeling is that the ARI has been useful and could continue to be so if it were improved. 	<ul style="list-style-type: none"> • In the short term: <ul style="list-style-type: none"> – Better define the strategy for the management of the remaining €18.5 million, following a "defensive" objective aimed at limiting deindustrialization; by targeting a few projects, by being more flexible on the requirements for reaching targets in terms of employment, by maintaining the terms of commitments sequenced over time (which could nevertheless be relaxed) – Reaffirm the target for companies in the NAF Manufacturing Code ; – Study the appropriateness in certain cases of extending to 4 years the duration of the project within the framework allowed by the aid scheme. • In the medium term with a view to setting up a new envelope: <ul style="list-style-type: none"> – Clearly define the targets: size, strategic sectors, political priorities... – To ensure that the scheme is complementary to regional, national and European schemes.
<p>Finding 2: sub-optimal implementation of the ARI scheme</p>	<p>Lessons learnt: make sure that all support mechanisms, instruction, decision-making and monitoring of implementation are clear and easy to understand.</p>
<ul style="list-style-type: none"> • Except for the "defensive" ARIs, a less than optimal coordination is observed between the actors involved in the implementation of the scheme (detection of new projects), particularly in terms of monitoring the files (amendments, payments, etc.). <ul style="list-style-type: none"> – If the capacity for local mobilisation of the RUI in the event of difficulties on a given issue seems interesting, it is less so on the implementation (agreements, effective dates of disbursement...); – The distribution of the roles of instruction, decision and follow-up of the files appears difficult to understand. 	<ul style="list-style-type: none"> • In the short term, ensure the proper finalization of the scheme: <ul style="list-style-type: none"> – Ensure that the Monitoring Committee provides more rigorous monitoring during the phases of releasing funds, key indicators, the progress of the Business Plan, the financial situation of the establishment. • In the medium term: <ul style="list-style-type: none"> – Clearly define the prospecting and management of the scheme, and ensure that tools are available to facilitate relations between the parties involved; – Set up digital tools to ensure fluid interaction with beneficiaries and between stakeholders (including ensuring that there is a dedicated website with a form to be loaded);



<ul style="list-style-type: none">• Many ARI files (particularly "growth and development") are extended, slowing down the implementation process, adding to the workload of the training teams and raising the question of extending the deadline for the scheme;• Although the examination of the files and the decision-making process do not seem to pose any difficulties, they are nevertheless perceived as "heavy" and time-consuming by the beneficiaries, except in certain high stakes cases;• There is no dedicated website/platform, although this would lighten the burden on beneficiaries, or even the capacity for continuous monitoring and evaluation (see opposite).	<ul style="list-style-type: none">– Ensure effective and efficient promotion and communication actions in favour of the scheme.
Finding 3: A poorly equipped scheme for the evaluation of results and impacts	Lessons learnt: set up a reference scheme of indicators and a shared information system.
<ul style="list-style-type: none">• There was a lack of an integrated information system between the stakeholders at the time the scheme was set up, and therefore a complete and up-to-date database enabling effective ongoing monitoring of the projects supported;<ul style="list-style-type: none">– The incompleteness and heterogeneity of the information transmitted by Bpifrance and the DGE (e.g. changes in staff numbers, Banque de France rating at the time the aid was granted, etc.) disrupts the monitoring and evaluation of the scheme;– There is no regularly updated database of management indicators, achievements, results and impacts.• There is a real difficulty in being able to directly contact all the beneficiaries of the MIP system under review.	<ul style="list-style-type: none">• In the short term:<ul style="list-style-type: none">– Set up a set of indicators and a regularly updated contact file;– Annually ensure that key objectives are met and that indicators are provided.• In the medium term:<ul style="list-style-type: none">– Ensure the existence of dematerialised tools for applications/files enabling more efficient information to be gathered from the information base required for evaluation;– Ensure the possibility of interviewing beneficiaries in order to enable the evaluation of any IAP mechanism (several contacts informed and complete).