

1. BIRD Awards – The General Program (*)

1.1. Introduction

This Handbook is intended to provide prospective applicants with information regarding the Israel-U.S. Binational Industrial Research and Development Foundation (henceforth "BIRD"). However, before a company starts preparing a proposal, as stipulated in the following pages, we strongly recommend a personal meeting with BIRD's staff in Israel or in the U.S. Such meetings enable a preliminary discussion of the project, the proposed partnership, and the various options available to prospective participants.

BIRD is managed by an Executive Director and a staff, headquartered in Tel Aviv, Israel. The Executive Director reports to a Board of Governors, comprising three senior government officials from both the U.S. and Israel. BIRD's U.S. offices are located in California, New Jersey and Texas. Information pertaining to BIRD's offices and other BIRD representatives across the U.S. can be found on our website www.birdf.com and in BIRD's annual reports.

All BIRD-funded projects must be jointly proposed and implemented by a partnership between an Israeli company and a U.S. company. Although BIRD is happy to assist companies from either country in finding a suitable corporate partner, the main responsibility for forming the partnership belongs to the companies.

(*) in addition to the General program BIRD runs three vertical programs. These are described in Section 1.4 below including specifics that are different for these programs than what will be described for the General Program.

1.2. The BIRD Model

1.2.1. Overview

Any two companies, one registered in Israel and the other in the U.S., may jointly apply for BIRD support, as long as they have the combined capability and infrastructure to define, develop, manufacture, sell and support an innovative product or service, referred to as "the Product". The two partnering companies are collectively referred to as "the Proposer". One key criterion is that each company has the demonstrated ability to carry out its part of the Product's joint development program, referred to as "the Project", as well as its part in the commercialization. Another key criterion is that the nature of the business relationship between the two companies is that of sharing; both in the Product's development program and in the revenues/profits derived from its commercialization.

BIRD cost-shares with the Proposer in the development, to the point of commercial readiness, of innovative (non-defense) technology-based products or processes which have reasonable potential for generating revenues and profits commensurate with the investment and the risks.

BIRD participates in the Project's development cost, referred to as "the Budget", with the Proposer, by funding up to 50% of the Project's budget, and referred to as "the Conditional Grant". The maximum grant BIRD can approve is \$1.5M per project. The two companies, separately and together, are obligated to repay BIRD the total Conditional Grant received, referred to as "the Repayment", but almost always only from the revenue generated by the Product's sales upon successful commercialization. (Please see a schematic diagram of **BIRD's model of payments-repayments** in figure 1.2.1).

In the traditional BIRD Model, the Project leads to a commercial-ready Product that generates revenues for the Proposer and repayments to BIRD. In some cases where significant development is still needed after the Project has been completed, BIRD may propose a Milestone Model that defines post-project milestones triggering repayments to BIRD unrelated to the Product's sales. During the discussions with the BIRD staff, verify if your Project will be associated with a traditional BIRD model or a Milestone Model.

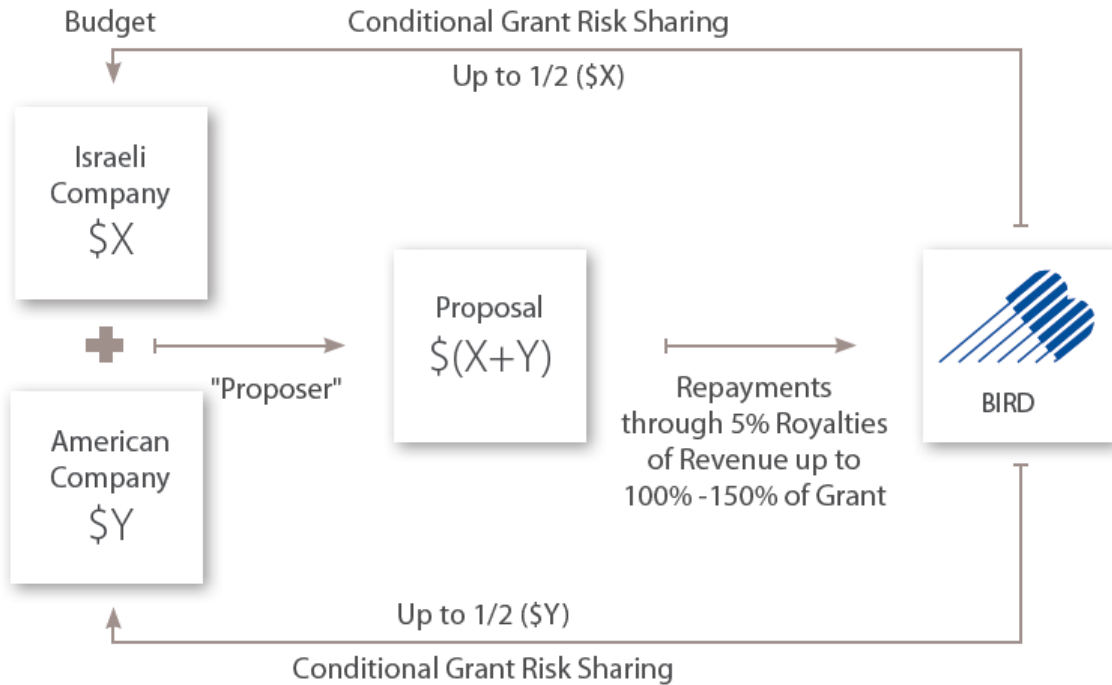


Figure 1.2.1

Companies should note that the common practice according to Generally Accepted Accounting Principles ("GAAP"), is for a company that receives a grant from BIRD to record it as a reduction of Research & Development expenses (in the Income Statement) and not as a liability (in the Balance Sheet). Since there is no assurance of a successful outcome for the project at the time the grant is received, the funding is considered a contingent liability that should be included in the notes to the financial statements. Should commercial revenues eventuate, BIRD receives repayments or royalties, depending on the form of commercialization, as discussed in Section 1.2.7., up to a maximum of 150% of its investment, in constant dollars. All payments to the Foundation are considered pre-tax business expenses. Companies should consult their accountants on the applicable practice for them.

1.2.2. The Product

The jointly developed Product must have significant technological innovation. One or both companies should possess intellectual property rights to the technology being developed and to the finished Product. The Product should target an attractive and growing market that is not necessarily geographic specific but is familiar to and can be serviced by at least one of the two partnering companies.

BIRD will consider products employing any area of technology and targeted for any market segment or application but encourages and preferentially supports projects employing breakthrough or state-of-the-art

technologies. The only exception to the above is BIRD's restriction to support products targeted for military applications.

1.2.3. The Project

The Project is defined as the scope and duration of the development program undertaken jointly by both companies, at the end of which the Product should be market-ready or with a clear and well-defined path to commercialization. (The only exception to this is the "Milestone Model". See explanation of this model on our website under the Guidelines and Forms section: in the following link: <https://www.birdf.com/procedures-submission-forms/>.) All activities required for subsequent commercial manufacturing, specification, and market introduction should be detailed in the Project, including beta-site testing, regulatory approvals, and test marketing.

Because of the wide range of projects and partnerships that may qualify for BIRD support, there are no hard and fast rules for the nature of the cooperation between the partners. They must follow their own judgment regarding the division of activities that will most cost-effectively accomplish the Project's technical and commercial goals. For example, suppose the bulk of the R&D is to be performed by one partner. In that case, the contribution of the other partner may focus on marketing, along with detailed Product specification, sales and service. Manufacturing may be conducted by either or both partners or by subcontractors.

The Project Effective Date (start date) may be as early as the 1st day of the third month prior to signing the contract with BIRD, which is called Cooperation and Project Funding Agreement (CPFA - See section 1.3.1). The Project duration is typically around 2 years but may be as long as 3-4 years, if deemed necessary for reaching commercial readiness.

1.2.4. The Proposer

The U.S. company and the Israeli company are collectively referred to as the Proposer. Both companies should have the majority of the necessary R&D resources required for the Project in their respective countries. The two companies should have the combined, proven capability and infrastructure to define, develop, manufacture, sell and support the Product defined by the Project.

Both partners should contribute and share their technological expertise and intellectual property in the execution of the joint development program, but their respective contributions do not necessarily have to be identical. However, the task assignments should be divided in such a way that neither partner's portion in the combined budget is less than 30%. Manufacturing responsibilities of the Product can be divided between the companies as they see fit and can be performed by subcontractors. Marketing and sales support for the Product can be divided between the project partners. Preferably, at least one partner should have relevant market presence, as well as a proven track record in marketing, Sales and Support, to successfully realize, upon product commercialization, the bulk of the sales projections indicated in the proposal.

1.2.5. The Project Budget

The Project Budget is estimated by the Proposer and is submitted as part of the Project proposal in the grant application process. It must include practically all development expenses to be incurred during the Project, including direct labor and its associated overhead, materials, subcontractors, consultants, travel, depreciation on new or used equipment employed and marketing expenses related to the development effort. The budget is prepared and submitted separately by the Israeli company (\$X in [Figure 1.2.1](#)) and the U.S. company (\$Y in [Figure 1.2.1](#)) and covers the entire duration of the Project.

1.2.6. The Conditional Grant

BIRD will cost-share in the joint development by extending to the Proposer a conditional grant (\$G) totaling up to 50% of the Project Budget (\$(X+Y) in [Figure 1.2.1](#). Each partner directly receives a portion of the total grant relative to its share in the budget.

The grant is divided into installments transferred to the partners to cover their expenses during the project. The first installment is made immediately after all parties sign the Cooperation and Project Funding Agreement (CPFA - See section 1.3.1) and the Bi-Lateral Agreement (See section 1.3.2). The next installments are made after receipt and approval of a joint technical report and separate fiscal reports submitted by each partner at the end of each one of the N Project segments (generally every 6 months). These reports cover the development progress and the actual expenses incurred during the reported segment. For the sake of cash flow planning, grantees can assume N+1 equal installments of \$G/(N+1) every 6 months.

1.2.7. Grant Repayments

Upon the Product commercialization, the gross sales (and not the profits) derived by either partner from sales of the Product (or subsequent products based on the technology developed in the Project) become the basis for repayment of the BIRD Grant. Repayments are made at the rate of 5% of each \$ of reported sales revenue.

Additional “repayment events” to occur if an outright sale of the technology or product financed by BIRD to any third party is made – in which case up to 50% of the transaction value is repaid to BIRD. If one of the companies is in breach of the agreement – in which case the full grant is due to be repaid by the party in Breach, and in “change of control” events where various options are open to the company and acquirer.

In any event - the maximum repayment amount due by the Proposer is dependent on the length of time that it takes to complete the repayments, as detailed in the table and chart below:

Years Following Original Date of Completion* of Project Development	Maximum Percentage of Conditional Grant and other sums to be Repaid (indexed by the U.S. CPI)
1 st	100%
2 nd	113%
3 rd	125%
4 th	138%
5 th and more	150%

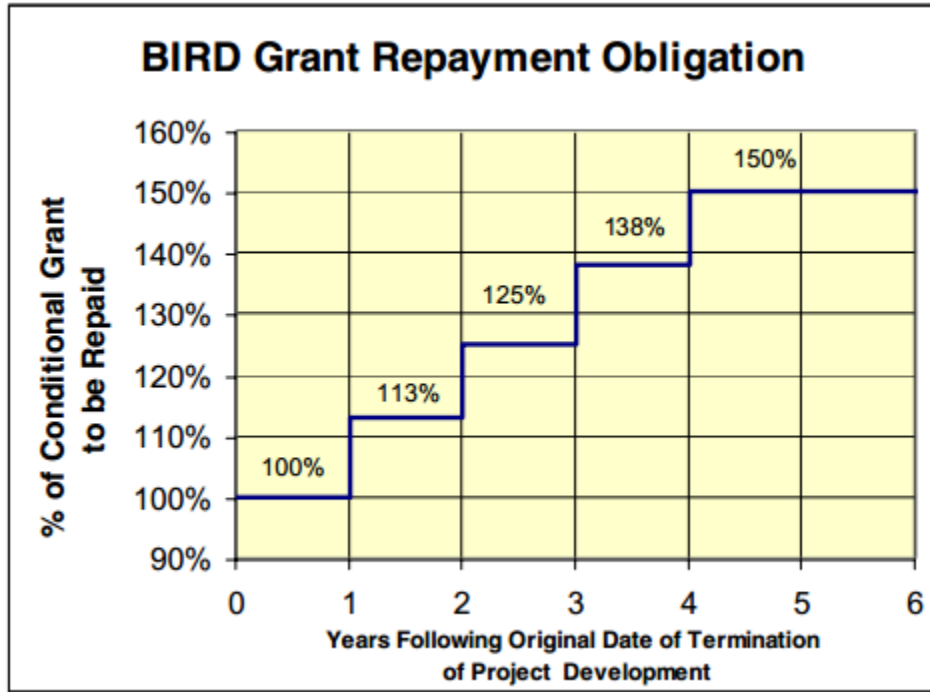


Figure 1.2.7

For a full year after Project completion (the 1st year of product commercialization), the repayment amount due is the actual cumulative sum granted by BIRD to the Proposer, linked to the U.S. Consumer Price Index (CPI). Since the repayment sum due does not increase beyond the 5th year after Project completion, the maximum repayment obligation that the Proposer can ever assume is 150% of the total sum granted by BIRD, linked to the CPI.

If Product commercialization is unsuccessful, and no revenue is generated, whether due to technological or marketing failure, in general, BIRD will not seek repayment of the Conditional Grant. Thus, BIRD participates with the Proposer in the risk of an unsuccessful product development investment (for detailed repayment conditions, please refer to Section 5 – Agreements).

If your project was categorized as a Milestone Project, then the Proposer will sign a Milestone CPFA, which incorporates the definition of a milestone (or milestones) that will trigger repayments to BIRD when achieved. The repayments should be completed within a year of reaching the milestone. If the repayments take longer (after coordination with the Foundation), then the repayments are escalated according to the escalation table depicted in Figure 1.2.7.

1.3. The Partnership Agreements

1.3.1. The Cooperation and Project Funding Agreement (CPFA)

Once a Project is approved by BIRD's Board of Governors, a Cooperation and Project Funding Agreement (CPFA) is signed by the two partners (the "Proposer") and the Foundation. The CPFA (see <https://www.birdf.com/agreements/> for a draft version) describes the work plan, project budget, payments

due the Proposer, repayments due the Foundation from sales or other income resulting from the project, reporting requirements, etc.

It is the Proposer, (see earlier definition), separately and jointly, that actually receives the conditional grant funds according to BIRD's CPFA, and it is the responsibility of the Proposer to repay the Foundation in the event that the technology (in whole or in part), developed in the BIRD project is commercialized.

If the Project was categorized as a Milestone Project, then the Proposer will sign a Milestone CPFA, which incorporates the definition of a milestone (or milestones) that will trigger repayments to BIRD when achieved. (See <https://www.birdf.com/agreements/> for a draft version of a Milestone CPFA).

1.3.2. The Bi-Lateral agreement

The Bi-Lateral agreement is a two-party contract between the U.S. and Israeli companies. This agreement is not a BIRD document and BIRD is not a party to this agreement. However, the agreement needs to be submitted to BIRD for review prior to signing of the CPFA. This formal company-company agreement should address issues relating to manufacturing rights, marketing responsibilities, ownership of technology, benefits to each company during commercialization, etc., and repayments to BIRD. The risk and profit-sharing nature of the cooperation, classifying it as a business partnership rather than a sub-contracting arrangement, should be clearly defined and understood. Agreement on these issues prior to initiation of the joint venture is critical to maintaining the cohesiveness of the company-company affiliation throughout all phases of cooperation.

As part of their separate agreement, Israeli and U.S. companies include a few "BIRD clauses" which, in effect, define what the companies agreed upon regarding funds to be received from BIRD and repayments to be made. Of course, this company-company understanding covers many other issues and items.

See guidelines to the Bilateral agreement document: <https://www.birdf.com/agreements/>

1.4. Vertical Programs

BIRD manages three vertical programs- BIRD Energy, BIRD HLS and BIRD Cyber. In most aspects, the process to submit to these programs is the same as the one for the General Program, with the following exceptions:

1.4.1 Eligibility

In all three vertical programs, one of the applicants may be a University or Research institute as long as the other is a corporation.

1.4.2 Maximum Grant

The maximum grant amount for BIRD Energy and BIRD Cyber is \$1.5M as in the General Program. For BIRD HLS the maximum grant amount is \$1M.

1.4.3 Approval process

(A) BIRD Energy Projects

The Executive Committee of BIRD Energy meets to deliberate the approval of projects once a year, usually in October or November.

Members of the Committee include U.S. representatives from the Department of Energy. Israel's Committee members are the Chief Scientist of the Ministry of Energy and the CEO of the Israel Innovation Authority. The fifth member of the Executive Committee is a representative of BIRD's BOG.

The decision by the Executive Committee is based on BIRD's internal review and confidential proposal technological reviews by two expert agencies, the U.S. Department of Energy, and the Israel Ministry of Energy, jointly with the Israeli Innovation Authority.

(B) BIRD HLS Projects

The Executive Committee of BIRD HLS meets to deliberate the approval of projects once a year.

Members of the Committee include a U.S. representative from the Department of Homeland Security (DHS) and a representative from Israel's Ministry of National Security. A representative of the BIRD BOG is an observer in this meeting.

The decision by the Executive Committee is based on BIRD's internal review and confidential proposal technological reviews done by reviewers nominated by DHS on the US side and by the Israel Innovation Authority on the Israeli side.

The recommendations of the BIRD HLS Executive Committee are subsequently subject to approval by the BIRD BOG.

(C) BIRD Cyber Projects

The Executive Committee of BIRD Cyber meets to deliberate the approval of projects once a year.

Members of the Committee include a U.S. representative from the Department of Homeland Security (DHS) and a representative from Israel's National Cyber Directorate (INCD). A representative of the BIRD BOG is an observer in this meeting.

The decision by the Executive Committee is based on BIRD's internal review and also on confidential proposal technological reviews done by reviewers nominated by DHS on the US side and by INCD on the Israeli side.

The recommendations of the BIRD Cyber Executive Committee are subsequently subject to approval by the BIRD BOG.