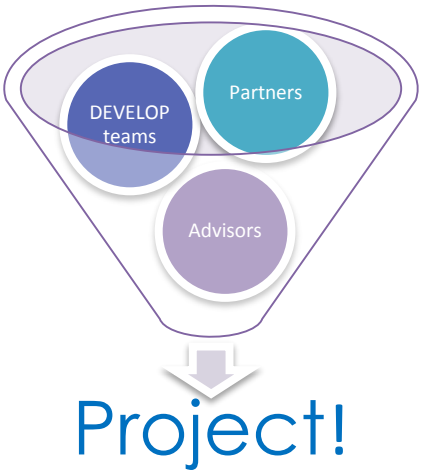
DEVELOP NATIONAL PROGRAM

PARTNERSHIP DEVELOPMENT MANUAL

Contents

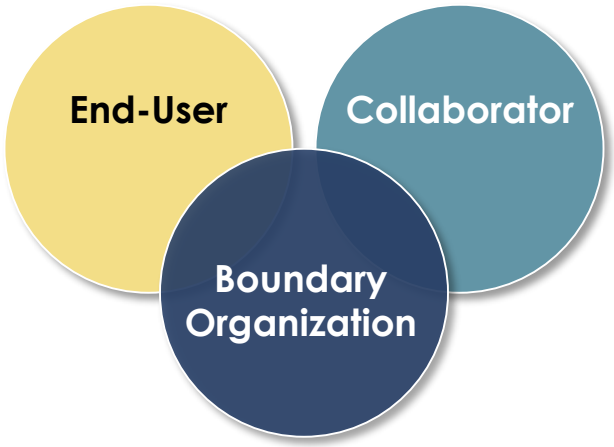


I. Introduction

DEVELOP is built on strong projects, and strong projects are built on strong partnerships.

In order to provide all DEVELOPers with a resource for building and cultivating strong partnerships, we have created this document as a collected source of internal and external "lessons learned" in partnership development. This is your resource to make the most of your time at DEVELOP but will serve you equally well in your future professional opportunities.

II. Who or What is a DEVELOP Partner?



Any organization that works with a DEVELOP project team towards the completion of a project is considered a "partner." DEVELOP teams usually partner with government organizations or non-governmental organizations (NGO's). Government partnerships can be with federal, state, local, regional or international agencies. NGO's are usually not-for-profit organizations that assist decision-makers within communities.

DEVELOP partners fall into two categories: end-users & collaborators. These different types of partners are described in detail in the DEVELOP Participant Handbook. At a basic level, an end-user is the partner using the DEVELOP-created tool(s) to enhance their decision making while a collaborator supports the project but does not use the tool(s). Not all projects will establish partnerships with collaborators. ***However, every project is expected to have an end-user.***

Although DEVELOP values all of its partners, DEVELOP strives particularly to establish strong relationships with end-users. This is in line with DEVELOP's

capacity-building mission and goal to aid decision makers. The strength of a project is assessed partly as a measure of the strength of its benefit to its end-user(s).

End-users & collaborators can be subcategorized in many different ways. Currently, Headquarters' managers require us to track the partners that disseminate project results to other decision & policy makers. These groups are called "boundary organizations."

Information about partners is collected on DEVELOPedia and in the Tracking Metrics Spreadsheet filled out by Center Leads each interim, and is retained by DEVELOP. The information available on DEVELOPedia is placed there for future teams' reference.

End-users are polled before and after each term with a Pre-Project Partner Form and a Post-Project Partner Form. These forms assess the end-user's familiarity with and usage of NASA data before and after the project, and are part of DEVELOP's regular self-assessment mechanisms (see example forms below).

III. Building a Strong Partnership

The core of a strong partnership is trust. That trust is important to DEVELOP and to the partner. Some things to consider as fundamental in building and keeping your partner's trust:

Dependability – If you say you are going to call them Thursday at 1 PM, then be sure to call them at 1 PM on Thursday. If you say you are going to find them a piece of information, then be sure to find it and send it to them. It seems simple enough, but this is where a good relationship can go bad or a timid partner become engaged.

- DEVELOP Example: Rarely is a DEVELOPer an expert in remote sensing or specific applications, and this can cause us all to not have exact answers for partner's questions in the moment. *"I'm not sure whether METRIC can forecast or not. I'll find the answer and get back to you."*

Honesty – Being candid with your partner is critical to gaining their trust. We all like sharing good news, but bad news is important in a partnership, too. Don't omit information just because you feel that it won't please the partner to hear. Don't mask the truth just to paint the picture you think they want to see.

- DEVELOP Example: *"GRACE won't be able to provide you with high enough resolution to see that phenomena."* We've all had cases where the data we use came up short for a partner's want. Being honest where there are limitations is vital to gaining their trust and saving time for them and you.

Passion – Show your enthusiasm for your work and their partnership. If they believe you are personally invested in the project and them as a partner, then they are much more likely to put their trust in you.

- DEVELOP Example: *"I feel really confident about this project because it seems that we are going to be able to create a tool that you really want!"* If you show you passion for the work, then the partner will likely feed off of that. But be honest with your passion – no need to be overly dramatic or cheesy.

Be sure to keep in mind that building trust isn't a one-and-done situation. It takes many steps to build a lasting partnership.

IV. Partner Engagement

Timeline for Partner Interactions

Below is a simple – and very generalized – timeline for how partner interactions can occur during a DEVELOP project lifecycle:

Two Interims Before Project	• Proposal-writing process; contact established with partner • Initial meeting with partner to discuss project details
Interim Before Project	• CL sends out Pre-Project Partner Form • CL sets up Week 1 meeting with project partner and project team • Work with NPO for export control plan related to partner handoff
Weeks 1 & 2	• Introductory meeting between partner & team (phone, email, or in-person) • Establish meeting schedule and communication expectations • Begin project handoff planning discussion
Weeks 3 - 8	• Share progress, challenges, and/or changes • Interview for video (optional), media release forms • Finalize project handoff plan
Weeks 9 - 10	• Final meeting/presentation • Invite to closeout event (if appropriate) • Conduct project handoff (if appropriate)
Interim Following Project	• Conduct project handoff (if appropriate) • CL sends out Post-Project Partner Form

Pre-Term Interactions

As the term start date approaches, the CL will be sent an email from NPO indicating that the project has been accepted. At this time, the CL will be asked to notify the partner(s) and to forward the link to the Pre-Project Partner Form to each end-user.

Before the start of the term, the CL should set up an introductory meeting for the team and the partner during the first or second week of the term. The CL should coordinate the time and place of this meeting with the project advisor. The introductory meeting may take the form of a telecon, videocon, or in-person meeting.

For multi-term projects, an introductory telecon at the beginning of each term will help re-focus the project and allow new team members to establish a connection with the partner.

Term Interactions

Prior to the introductory meeting, the team lead and team members should be brought up to speed on the partner's background and interest in the project. The team may be provided with a copy of the project proposal and the Pre-Project Partner Form responses to facilitate their knowledge of the partners.

During the introductory telecon the CL should introduce the team and let the partners introduce themselves. The CL or the team lead should outline the project and explain the team's approach. The team lead should ask for details about the partner's needs or contributions, depending on partner type.

Lastly, the team should confirm the tentative communication plan from the proposal with the partners.

V. Connecting with a Project Partner

There is no wrong way for a DEVELOP project idea to come about. However, DEVELOP project ideas seem to most commonly come from three sources: (1) from a DEVELOPer, (2) from a partner, and (3) from an advisor. The second example is the most straightforward since the project's partner is already engaging you, but how do you reach out to a potential partner for a project idea when no previous contact has been established? How do you even figure out who the partner should be for a project idea?

There are several ways to locate a project partner. Partners may be referred to the proposal writers by a mentor or advisor, or another DEVELOP team that has worked on a similar project. Conferences and workshops often provide

networking opportunities within a particular area of interest. Online research related to the community concern can provide an idea of what sort of organizations are active in the project area.

> DEVELOP Example: *During a weekly meeting with our Science Advisor, she mentioned that she had a great idea for a future project. The idea focused on using this new formula for calculating drought stress on vegetation and that a newspaper article mentioned potential applications for this in Kansas. Everything about the idea seemed like a great fit for DEVELOP except for the fact that I had no contacts or even knew who would want a tool like this in Kansas.*

This situation is pretty common in DEVELOP, and a little bit of brainstorming now will help you clear this hurdle quickly should it arise for you. Here is the simple question to ask yourself: ***Who would be responsible for making decisions related to this community concern?***

In the case above we see that vegetation in Kansas is the main topic but that drought is the concern within that topic. So, who would care about that? Likely someone either in agriculture or water resources at the state or federal-level. A quick Google search provides a bit more insight - Kansas has a Department of Agriculture and within that a Division of Water Resources that "governs how water is allocated and used." Not every case will be so straightforward. If you try to trace the topic back to a related decision making situation, then look for the group(s) that would be responsible for that decision making – that will likely be your project partner.

VI. Sample Communications

Below we have collected example emails for various communication situations you might find yourself in. These are meant to provide you with a foundation to work from. So, feel free to edit these examples to fit your specific needs or simply as an example that will spark ideas for you to write your own communication.

> **Situation 1**: Contact a potential partner you have never contacted before
>
> Example 1
> *Good morning/afternoon (blank),*
>
> *My name is (blank), and I am with NASA's DEVELOP National Program at (insert location). DEVELOP's goal is to conduct applied research projects that partner with external groups to utilize NASA's Earth observations in their decision making process.*

I recently came across a project idea that I think could provide you and your organization with some beneficial tools. I'd like to talk to you more about this idea and about how DEVELOP works. Do you have any availability in the next few weeks to have a short – maybe 30 minute – phone call?

Thanks, and I am really looking forward to talking to you soon.

Sincerely,
(your name)

Example 2

Hello (blank),

My name is (blank), and I work with NASA's DEVELOP National Program at (insert location). DEVELOP conducts rapid applied research projects that utilize NASA Earth observations to create new tools for decision makers. We are currently planning an upcoming project studying (blank) in the (geographic location) using (satellite/sensor). I was wondering if the results of this project sound like something that would be useful to your work?

I'd really like to speak with you further about the project idea and any input/suggestions you have on the focus of the work. Are you available for a phone call in the next few weeks to discuss DEVELOP and the project further?

Thanks, and I am looking forward to our conversation.

Sincerely,
(your name)

Situation 2: Contact a potential partner you met in-person

Hi (blank),

My name is (blank), and I am the Center Lead for NASA's DEVELOP National Program at (insert location). I spoke to you at the (location/event) on (when) and attended your presentation that afternoon. I found it quite exciting and obtained the slides from (mutual contact).

DEVELOP's mission is to use NASA Earth observations to address community concerns and public policy issues while cultivating expertise in the professionals of tomorrow. Since DEVELOP's inception in 1999 we have been building partnerships with both public and private organizations, from local non-profits to foreign governmental agencies. I believe that there is substantial overlap between the mission of DEVELOP and your organization.

We would like to invite you to a telecon to explore partnership opportunities between DEVELOP and USAID in the area of MENA water resources. We hope to find a way to pool our resources in a powerful way to affect the urgent needs of this critical region. We feel that by combining the fast turn-around built into DEVELOP's structure with the scope of USAID we can make a positive difference in the livelihood of the people of the Middle East and North Africa. I look forward to hearing from you soon.

Sincerely,
(your name)

Situation 3: Respond to an individual/group that requested a DEVELOP project

Hey (blank),

Thank you very much for your interest in the DEVELOP National Program. I reviewed your project idea that you emailed us about on (date), and it appears that the scope and focus of your idea would fit very well into the DEVELOP model.

Are you available to have a phone meeting in the next few weeks? I'd like to discuss your idea further and chat with you about next steps to propose & hopefully conduct your project.

I've copied to this email our Lead Science Advisor, (name), who will join us for the call.

Thanks, and I am looking forward to our chat.

(your name)

Situation 4: Contacting a previous DEVELOP project partner about a potential future project idea

Good morning/afternoon (blank),

My name is (blank) from NASA's DEVELOP National Program. We appreciate your previous partnership with DEVELOP and hope that deliverables from that project are still useful to you and your organization. I'm reaching out to you today to see if you have any current needs or ideas that could be the focus of a future DEVELOP project.

Perhaps we could speak soon by phone to discuss any of these ideas and see if any would be a good fit for DEVELOP. If so, I'll be sure to invite our Science Advisor, (name), to that meeting to provide any additional scientific insight to the conversation.

Thanks, and I am looking forward to our discussion and hopefully another productive project.

(your name)

Situation 5: Introduce project team to partner

Good morning/afternoon (blank),

This is (blank) from DEVELOP at (location). I am happy today to introduce you to the project team that will be conducting the DEVELOP project you are partnering with us on: (name of project).

First, I'll introduce (blank) who will be the Team Lead for the project. She will have (#) other team members working on this project: (name 1), (name 2), and (name 3).

We'd like to setup a video or phone meeting with you soon so that everyone can have a more thorough introduction and begin discussing the project plan for this term. The team will gain a lot from hearing you talk about need for this project from your perspective and how you plan to use to tools they will be creating.

Is there a convenient time for you to meet with the team in the next two weeks? We are all looking forward to speaking with you soon.

Thanks,
(your name)

Situation 6: Update partner on project proposal status and invite them to complete the Pre-Project Partner Form

Good morning/afternoon (blank),

We are pleased to update you that the DEVELOP National Program Office has tentatively accepted our proposal (brief description of project).

We are moving forward with preparing for the project. The project term begins (insert date). As a capacity building program, DEVELOP is working to track partner capacity before and after the project. We therefore have prepared two very brief Google forms to help us better understand your needs and capabilities, one to be completed prior to the start of the project, and one to be completed after the conclusion of the term.

We therefore ask you to please take ~5 minutes to complete our pre-form by (insert date). We thank you for your time; please let us know if you have any questions regarding the forms or the upcoming project.

Follow the link below to fill out the form.

Url: (include link provided by Impact Analysis Team)
Project title: (insert short title)

Regards,
(your name)

Situation 7: Invite partner to complete the Post-Project Partner Form

Good morning/after (blank),

I am writing to follow up on your participation in the (term & year) term of the DEVELOP National Program with the (project short title) project at (location). As a capacity building program, DEVELOP is working to track partner capacity before and after the project. We therefore have prepared a very brief Google form to help us better understand your

capabilities, use of remote sensing, and overall experience with the program.

We therefore ask you to please take ~5 minutes to complete our post-form by (date). We thank you for your time and partnership; please let us know if you have any questions regarding the forms or the completed project.

Follow the link below to fill out the form.

url: (include link provided by Impact Analysis Team)
project title: (project short title)

Regards,
(your name)

VII. The Proposal Process

Contact with a partner during the proposal-writing process is critical. If a partner has been referred to you by someone, ask them to introduce you to the partner. If you are approaching an organization with no previous experience with DEVELOP, keep your "elevator" speech handy! Cold calls can be unnerving, so it is helpful to write down what you would like to say ahead of time. Keep the initial contact brief and make sure to include the important details about DEVELOP and the proposed project. It may be helpful to send a copy of the project proposal draft to interested potential partners.

You are encouraged to ask partners for a Letter of Support. Letters may be address to Lauren Childs-Gleason (lauren.m.childs@nasa.gov) and should describe in detail how the project will benefit the end-user. The Letter of Support is submitted with the proposal.

Suggestions, not requirements, on what the partner should include in their Letter of Support: **(a)** description of the issue at hand, and why it an important one for DEVELOP to address, **(b)** description of how the project could benefit the organization's decision making process, & **(c)** description of their ability to work with the team (e.g., available for multiple telecons during the term.

Questions to Ask During Proposal Writing Process

You will need to fill out specific information on the proposal regarding each partner. Make sure to cover the following topics once you have established a partnership:

End-User Current Decision Making Process:

- What is the partner's current decision making process and/or management practice related to the community concern focus of this project?
- What decisions/policy are they making?
- Is any remote sensing currently involved?

End-User Benefit:

- What will be the benefits of your project to the end-user(s)?
- How will this impact their decision making process?
- Will it save them time/money/etc.?

NASA Earth Observations Capacity:

- What is the end-user(s) familiarity and/or usage of NASA Earth observations?
- Have they ever used Earth observations before?
- If they are already familiar and/or use NASA Earth observations, how does this project build their capacity?

Collaborator & Boundary Organization Support:

- How will the organization support and be involved with the project?
- How is the boundary organization connected to the potential end-users?
- What is the boundary organization's capacity to use and/or transition and disseminate project results and methodologies to other groups?

It is good to establish a tentative communication plan for the term during the proposal-writing process. How often and how will the team communicate with the partners? Discuss the transition approach to the end-user – how will you hand off your decision support tool(s)? How and when will the tool(s) be used and/or implemented by the partner?

Make sure partners are aware that they will be sent an email from the Center Lead containing a link to the Pre-Project Partner Form.

Note to Team Leads: Be sure to keep records of all contact with the project partner (e.g., meeting notes), including contact information, and to make your advisor(s) and CL are aware of all communications.

Tips for Proposal Authors

- Be professional. You are representing yourself, your team, your advisors, your node, DEVELOP, Applied Sciences, and NASA!
- When describing how the tool you are providing will benefit the partners, consider using language like "augment", "enhance", "complement" and "extend", and avoid words like "replace" – the reasoning behind this is that your work will give them another tool in their decision making process, but it is not necessarily meant to be a replacement of what they already do and that can seem threatening to some end-users, so be diplomatic.
- Keep in mind the language used when describing the partner/end-users' current decision making process – do not use overly negative words.
- Keep in mind the limitations of resolution (spatial and temporal) of NASA data and work within them.
- Be realistic in what you promise and the expectations of the partner, in fact don't "promise" anything, but ensure the plan you are working to is clear and that there is a healthy understanding of challenges and potential obstacles/risks.
- Ensure that partners know and understand the project timeline, project objectives, what deliverables/tools will be created and provided them at the end, and general hopes/expectations.

General Tips (*Also found in the Orientation*)

- Have a plan and schedule, but be flexible to your partner's needs.
- Understand the partner's needs - what kind of data/tools are useful, what software do they have access to, what tutorials or products would be helpful?
- Keep communication lines open and ensure the team follows through. Generally speaking, the Project Lead should be the POC for

communicating with a partner unless it is specifically delegated to another team member.
- All emails to partners should be approved by the Center Lead and you should cc the Center Lead always.
- Include your project's Science Advisor in partner communication as much as is possible per your advisor's availability

VIII. Partnership Conclusion

A partnership is concluded once the final products/tools have been delivered to the end-users and/or boundary organizations. This may take place at the end of a term or during the interim. It is a good practice to invite partners to the node's closeout activities, however, their attendance is not required.

Commonly Used Hand-off Styles

- Email of deliverables (tech paper, tutorials, presentation, etc.)
- Teleconference or videoconference presenting the results and methodologies
- In-person presentation/training/workshop of results and methodologies

Get creative in how and what you hand-off. Interesting idea? Speak to your Center Lead about it!

Individual Responsibilities

Center Lead

- Be professional. You are representing yourself, your team, your advisors, your node, DEVELOP, Applied Sciences, and NASA!
- Consider ways to keep communication lines open while project is in approval stage (in limbo).
- Attend introductory meetings.
- Monitor email and other communications between teams and partners (preview for professionalism).
- Invite partners to closeout activities, if appropriate.
- Attend handoff if possible (if separate from closeout).
- Ensure that partners know and understand the project timeline, project objectives, what deliverables/tools will be created and provided them at the end, and general hopes/expectations.
- Make sure that partners understand when the project will conclude and who they can contact following the end of the term (typically the Center Lead).

- Communicate that DEVELOP will follow up to assess their experience and satisfaction with the project results.

Team Lead

- Be professional. You are representing yourself, your team, your advisors, your node, DEVELOP, Applied Sciences, and NASA!
- Don't be afraid to initiate contact with the partners. They have agreed to be a partner because they are interested in the project, and will likely be happy to hear from you and help in any way.
- Build off of previous communications with the partner/end-user and keep communication flowing but not overwhelming; stream communications through one point of contact for clarity.
- If a partner does not respond to attempts to communicate, do not get discourages. Partners may not be able to respond quickly to inquiries. Let the CL and project advisor know of your efforts.
- Ask your CL to preview your emails for professionalism. Always cc center lead and advisor on email.
- Communicate changes in the project with partners in a timely manner so they know what to expect at the project's conclusion.
- Coordinate with the CL and project advisor to arrange the project handoff.
- Communicate that DEVELOP will follow up to assess their experience and satisfaction with the project results.
- If any difficulties arise, let your CL and advisor know immediately.

Team Member

- Be professional. You are representing yourself, your team, your advisors, your node, DEVELOP, Applied Sciences, and NASA!
- Keep you team lead and CL in the loop on ALL communications.

IX. Export Control & Software Release Authority

The NASA Export Control Program is based on the philosophy: "We want to maximize the benefits of our international efforts while ensuring that we comply with U.S. export control laws and regulations". This is the personal responsibility of each employee or contractor to pursue appropriate international activities involving transfers of technologies, software, and commodities. The Agency's Export Control Program is the mechanism that provides checks and safeguards at key steps to help manage international activities and ensures that NASA works within Export Administration Regulations (Department of Commerce) and the International Traffic in Arms Regulations (Department of State), which could result in criminal, civil, or administrative enforcement actions against NASA, individual employees, and/or private contractors.

This means that for any project deliverables, products, decision support tools, etc. to be transferred to any partner (domestic or international) a review must take place first. The NPO ensures that DEVELOP works within NASA Export Control guidelines. The NPO must be made aware of any presentations, publications, or information transfer that take place **before** they occur. A "transfer" is considered to be an email, publication, presentation, telecon, webinar, etc. If you have any questions or have content you'd like to publish or hand-off to foreign entities (especially in designated countries) contact Lauren Childs-Gleason. The process typically takes 2-5 weeks.

Administrator Bolden: "As a U.S. Government Agency on the forefront of technological development and international cooperation in the fields of space, aeronautics, and science, the National Aeronautics and Space Administration will strive to fulfill its mission for cooperative international research and civil space development in harmony with the export control laws and regulations of the United States. Due to heightened proliferation challenges facing the United States and the world, including risks posed by the spread of missile technologies and weapons of mass destruction, and in view of the significant criminal, civil, and administrative penalties that may affect the Agency and its employees as a result of a failure to comply with U.S. export control laws and regulations, it is the responsibility of every NASA official and employee to ensure that the export control policies of the United States, including nonproliferation objectives, are fully observed in the pursuit of NASA's international mission."

Software Release Authority is NASA's system for approving all software and programming tools created by agency funds. It takes into consideration legal and scientific requirements relating to contracts and copyrights. For any tools, programs, or software created by a team will need to go through this system **before** being handed-off outside of DEVELOP. The process is rigorous and requires a lot of paperwork, but is led by the NPO. If your project has materials that would need to go through this process, or you have questions regarding if your tools are required to go through it, contact Jeff Ely as early as possible. The process typically takes 6-15 weeks.

Designated Countries

NASA goes by the State Department's "Designated Countries" list, which is a compilation of 41 countries with which the United States has no diplomatic relations, countries determined by Department of State to support terrorism, countries under Sanction or Embargo by the United States, and countries of Missile Technology Concern. Communication with partners in designated countries has restrictions, so coordinate with NPO ahead of opening

communication lines. NASA's Designated Country List http://oiir.hq.nasa.gov/nasaecp/index.html.