**Instructions for CF-1**

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**Transdisciplinary Research Communications Set-up SOP**

**(Use with the** f4089d7 **revision of CF-1)**

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# General Instructions

## How to Get Help, Find the Latest Releases, and Contribute

The latest information and releases around the CF-1 and related publications can be found at the Transdisciplinary Team Science Protocols project in OSF:

<https://osf.io/67rq8/>

To contribute error reports and feature requests or to read about planned releases, please visit the github repo dedicated to Transdisciplinary Science templates:

[https://github.com/ResearchSoftwareInstitute/TRTemplates/](https://github.com/ResearchSoftwareInstitute/TRTemplates/tree/master/templates)

Please also feel welcome to log issues, fork, and push new contributions.

## Purpose of CF-1

Establishing team communication involves a variety of activities at different stages of project start-up. The CF-1 outlines specific steps to take during start-up, and here we provide additional guidance for those steps.

## Reminders

**Keep the CF-1 relevant**. The CF-1 references multiple supporting documents. If updating one of the documents referenced by the CF-1, also update the reference to point to the new version in the associated CF-1, increment the version and record it in the table under section “*11 Document History*”.

**Disclaimer**: Any reliance you place on information from the template is strictly at your own risk.

# Specific Instructions

The CF-1 is designed to be extended or modified in accordance with your team’s scientific goals, membership and roles, funding parameters, and legal requirements. You can adjust the order of activities and the personnel responsible for completing them to suit team priorities and capabilities.

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When using the CF-1 or this document, please cite:

Robasky, et al, 2019. “Transdisciplinary Team Science Protocols.” OSF. August 3. doi:10.17605/OSF.IO/67RQ8.

**Part 1. Overview**

This simple protocol is designed to be extended and modified to suit individual needs, including the “Part 1. Overview” section of the CF-1 and this guidance document itself.

**Part 2. Procedures**

Adapt the order of the steps below to suit team priorities.

**1 Pre-Engagement:**

Some of the documents listed in this section may need to be created or adapted by the CF rather than the Funding Body, but must nevertheless be complete before planning can begin.

**1a** **Team Vision**: Communicate the vision in a glance with a graphical abstract. Use a simple, easily communicated vision statement to inspire the Team towards success during the start-up phase and throughout the project. The vision should be communicated as clearly and frequently as is practical.

**1b** **Team Charter**: All charters should include objectives, governance, members, deliverables, milestones, roles and responsibilities, timelines, and meeting modes. Sub-team leader details, such as contact, location, proposal, and funding might also be included.

**1c** **Steering Body Charter**: Include requisites for membership, members, meeting regularity and tactics (e.g., virtual or face-to-face, attendees, how to solicit and dispatch agenda items).

**1d Coordination Facilitator (CF) Charter**: Include contact and location details of the assembled CF members, their responsibilities, and in particular how to get in-touch with questions or requests regarding the Team Portal, CTP, or any other CF responsibility.

**2. Planning Documents**

In this section, cite the *Planning Documents*, drafting them if necessary, to accelerate project start-up and lay the groundwork for collaboration.

Drafting some of the documents listed in this section may be out of the scope of the CF but are included here because they must be complete before set-up can begin. As such, documents could be removed from the CF-1 if they are completely out of scope of the CF. Also, adjust the order of completing these documents based on the unique needs of the Team.

**2a Stakeholder Engagement**: Stakeholders can include funding parties, funded leaders, team members, and users. Include in the list the invested resources of each stakeholder. Resources can include time, money, expertise, and data center usage. Invested resources should reflect the stakeholder’s influence on the collaboration. Include stakeholder name, role, affiliation, and the strategy the CF will use for engagement and follow-up with that stakeholder. Engagement and follow-up strategies include bi-weekly meetings, emails, phone calls, progress reports, face-to-face meetings and instant message.

**2b Code of Conduct** Code of conduct can foster a “safe” environment where feedback can seem “normal”; this can also accelerate trust relationships. How to report conduct violations, who/how the violation will be judged, and what are consequences for violations should all be addressed.

**2c Conflict Resolution**: Should include methods for moderating disputes over things like author acknowledgement, cross-team milestone dependencies, and over-lapping scopes of work. You may draft the Code of Conduct to subsume the conflict resolution policy. Depending on the Team’s complexity, conflict resolution policy may also describe a Request for Comments (RFC) process for building consensus around experimental design, scientific methods, and the like.

**2d CF-1 Risk Assessment:** Assesseshow likely the CF-1 and supporting artifacts are to change after the full Transdisciplinary Team is assembled. May include redress for stakeholders that are not necessarily aligned with the policies and decisions listed in the CF-1 artifacts prior to convening of the broader Team. For example, a document may be assessed as being particularly at risk for change and consequently may be scheduled for early review by the Team once assembled.

**2e CF-1 Change Control**: Specify change control policy to address how requests for changes to the CF-1 documents, Team Portal, CTP will be solicited, recorded, prioritized, addressed, and accepted. Change control policy must also address any retrainingrequired for proposed and implemented changes. Name the specific change control repository (e.g., name the github organization and repos).

In defining change control processes, favor “staying the course” over making costly changes, and document the strong, evidence-based justifications that drive change. Consider carefully whether or not to add the overhead of an issue tracking platform to the Collaboration Technology Platform (CTP) for tracking feedback, logging important decisions, and documenting the rationale and justification for the decision.

The collaborations are likely complex enough to warrant building an issue tracking platform if one or more of the following are true:

* There is a need for tracking competing feedback
* Feedback are sourced from multi-faceted, parallel channels
* There is a need to track decisions and issue resolutions
* There is a requirement for tracking decisions and resolutions per release

Anticipate the need for an issue tracking platform to be greater during the “Storming” phase of Team formation[1]. Consequently, if an issue tracking platform is implemented, it should be monitored regularly for opportunities to simplify the process and reduce overhead, should all of the justifications for building the process no longer hold.

**2f Consortium Agreement**: Non-US agreements may be complex and obligatory to funding, while US agreements may be dependent on IP sharing and the requirements of the technology transfer offices within the organizations performing the research[2, 3]. For these reasons, here we refer to MCARD-H2020 (EU), AUTM (US), and other region-specific efforts where a Consortium Agreement is required.

**2g Internal Communication Plan**: This is not the same as an External Communications Plan. The External Communication Plan can be developed after Team set-up and will typically include things like a social media campaign. In the internal plan, select intra-Team collaboration technologiesappropriate to the Team’s priorities, experience, and budget, which will ultimately comprise the CTP. Include technology choices and rationale for technologies used by the Team Portal, along with the tasks those technologies support, such as calendaring, a photo member directory, milestone tracking, document sharing. Highlight project dependencies between assigned tasks or work packages. Minimize adoption and implementation barriers. Define brief, best practices for using each of the selected collaboration technologies. Extend the Risk Assessment performed in a previous step to include the collaboration technologies, setting the baseline for financial justification of the CTP for regular review.

Opt for easy-to-install and simple-to-use technologies that can get Team activities up and running promptly. Choose “good-enough” over “ideal” solutions, embrace risk, avoid vendor lock-in, and plan to revisit and improve collaboration technology choices as Team collaboration practices evolve.

**3. Set-up Tasks**

Adopt, configure, and harmonize collaboration technologies with the *Planning Documents* by checking off the tasks in this section. In customizing this protocol, please move steps described in this section to the ‘Planning’ sections, as per the Team’s unique needs.

Set-up should also include scheduling for initial Team meetings and workshops. Details on how to organize Team events are outside the scope of this protocol.

**3a Create the Team Portal**:: Build the Team Portal using the technology selected in the Internal Communications Plan. Publish all *Guiding* *Documents* and *Planning* *Documents* to the team portal. Publish all the technologies in the CTP as they come on-line, under appropriate access control.

Depending on technical expertise, the team portal may be implemented by team members other than the CF, though it should be overseen by the CF.

**3b Build the Collaboration Technology Platform (CTP):** Build the CTP using the technologies selected by the Internal Communications Plan. Examples of collaboration technologies include tools for document sharing, calendaring, and direct messaging. Also included in the CTP are any plug-ins to the Team Portal such as polling apps, member directory entries, and news-feeds.

Other members of the Team may bring the required technical expertise for implementation of the CTP, though the CTP development should be overseen by the CF

**3c Review and revise *Guiding Documents* and *Planning Documents***: Following processes described in the Change Control Process and Conflict Resolution Process, update initial documents as needed; publish to Team Portal.From this point forward,planning documents will be regularly reviewed, but guiding documents should be essentially static.

**3d How to use the CTP:** Create CTP usage guidelines, comprised of the brief, best practices defined during the “Planning” for the selected collaboration technologies. Prominently publish any CTP access points and usage guidelines to the Team Portal.

**3e How to On/off-board a Member**: Define and include training on processes for the full suite of knowledge and tools new team members need when joining the collaboration. Enable access to guiding documents, planning documents, and usage guidance for the CTP

Onboarding should include training on *Guiding Documents*, current processes and policies, including Code of Conduct and where to find the most current usage guidance for the CTP. Onboarding set-up should define and include training on how to solicit Team Portal feature requests, meeting agenda items, and newsletter items. Consider requiring new team members to use the CTP when completing various onboarding tasks (e.g., create a profile, add a calendar entry, make an edit to a shared document) in order to confirm access and become familiar with the components.

**3f How to Report to the Funding Body:** Include forms and all information necessary for compliance with agreements and funding body requirements.

**3g How to Charter a Sub-Team:** Create sub-team organizational templates and charters; publish to team portal.

Where feasible, make agile policies in anticipation of changes in sub-team membership and responsibilities. Anticipate frequent sub-team creation, transitioning and adjourning, as well as organically-assembled teams. Incentivize Sub-teams to socialize their efforts by minimizing the overhead needed to do so.

**3h Baseline Health Survey Results:** Measure the baseline collaboration health using pre-determined, objective metrics[4] to be repeated as collaborations progress

**3i CF Document Catalog:** Create additional policies and training. Identify the relevant, unique needs of the team. Prioritize tasks; identify team members responsible for implementing them; create documentation, training, and onboarding procedures for any additional policies; publish documentation to the team portal. Examples of additionalpolicies that might be added to the CF Document Catalog include access controls (how open will the team be?); rules for team membership (how is one invited?); IRB and human subjects requirements; laboratory protocol policies; data production, release, sharing, and reproducibility policies; publication and credit-sharing policies; and conflict of interest policies.

**4. Continuous Improvement Tasks**

Repeat the tasks in this section at regular intervals to ensure policies, processes, and expended resources continue to be relevant to team needs.

**4a Review and refine tems in the CF Document Catalog:** Review all planning documents, processes and policies (but not guiding documents); Subject any change requests to the *7e CF-1 Change Control*  policy. Publish any updates to team portal and incorporate changes into onboarding process.

**4b Review and refine resource investments and deliverables:** Review and adjust team and sub-team charters, deliverables and resources; publish any updates to the team portal.

**4c Solicit prioritize/triage, and respond to Team Portal and CTP Change Requests:** Respond to needs for publishing new or revised processes, policies, and training. Remove artifacts that are no longer needed and can be aged-out. Change Requests may includeaddition of artifacts,changes to artifact status (e.g., draft, final, obsolete), new and modified meeting dates and agendas, news items, etc. In addition to needs identified by team members, look for opportunities to refine the CTP in accordance with the team’s evolving needs, culture and values. Other members of the Team may bring the required technical expertise for implementing changes to the CTP, in which case the CF provides oversight. For simple change requests, such as ‘publish a news item’, responses should be prioritized and addressed immediately with a simple workflow. It may be necessary to define processes and milestones for responding to more complex change requests, such as ‘implement single-sign-on to Team Portal and ‘Data Release Portal’. In the case of a more complex change request, policy should be included for updating the requestor on progress toward a solution and soliciting the requester’s approval on the solution.

**9d Reassess and refine change control policies:** Adjust milestone cycle duration in response to changes in request complexity, urgency, and backlog. As the CTP and Team Portal mature, milestone-driven activities should diminish.

**9e Survey Collaboration Health**: Apply metrics defined during set-up to reassess collaboration health[4] and compare to baseline. Adjust processes as necessary.

**Part 4. History**

Track any changes to the CF-1 in this section. Changes to track include modifications made to the protocol itself and also any changes to the form responses.

# Additional Information

## Who Should Prepare the CF-1

We define *CF-1 Preparer* as a member or delegate of the CF or the Funding Body prepares the CF-1. The *CF-1 Preparer* needs full access to any *Guidance Documents*, *Planning* Documents, and to any documents prepared during Set-up stage. If the *CF-1 Preparer* is expected to draft any of the *Planning Documents* rather than just collect them, they must be vetted for the appropriate editorial skills and have access to business, science domain, technical, and project management skills.

## References

1. Tuckman, B.W., *Developmental sequence in small groups.* Psychological bulletin, 1965. **63**(6): p. 384.

2. Van Eecke, P., et al., *Study to support the development and implementation of Innovation Union commitment 21 on knowledge transfer: work package 2, interim results*. 2014, Luxembourg: Publications Office.

3. *DESCA 2020 Model Consortium Agreement*. 2019.

4. Mâsse, L.C., et al., *Measuring collaboration and transdisciplinary integration in team science.* American journal of preventive medicine, 2008. **35**(2): p. S151-S160.

## Document Revision

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| --- | --- | --- | --- | --- |
| **Date  (YYYY-MMM-DD** | **Prepared by** | **Version** | **Reviewed / Approved By** | **Brief Description of Change** |
| 2019-Aug-02 | Robasky, et al | Github repo:  <http://bit.ly/2YFS3lM>  commit: a26b4f6 | n/a | Original instructions |
| 2019-Aug-14 | Robasky | Github repo:  <http://bit.ly/2YFS3lM>  commit: | n/a | Broadened ‘service ticket’ language to instead discuss ‘issue tracking’ |