

## ***Project Workflow Management*<sup>1</sup>**

### **Scope Change Control Process** <sup>2</sup>

By Dan Epstein

**Note:** *This article is based on the book [Project Workflow Management: A Business Process Approach](#) by Dan Epstein and Rich Maltzman, published by J Ross Publishing in 2014. The book describes PM Workflow® framework, the step-by-step workflow guiding approach using project management methods, practical techniques, examples, tools, templates, checklists and tips, teaching readers the detailed and necessary knowledge required to manage project “hands-on” from scratch, instructing what to do, when to do and how to do it up to delivering the completed and tested product or service to your client.*

*The project workflow framework is the result of Dan’s research into the subject, having the following objectives:*

- 1. Create the virtually error-free project management environment to ensure significant reduction of project costs*
- 2. Reduce demands for highly qualified project managers using the step-by-step workflow guiding approach.*

*While PM Workflow® is the continuous multi-threaded process, where all PM processes are integrated together, this article will attempt to describe the Scope Change Control group of processes as a stand-alone group of processes that can be used independently outside of PM Workflow® framework. It will be difficult in this article not to venture into processes outside of scope change processes, such as planning, quality, communications and other management processes, so they will be just mentioned. However, to get full benefit and the error free project management environment, the complete implementation of PM Workflow® is required.*

*In order to understand how PM Workflow® ensures this environment, I strongly recommend reading my article [Project Workflow Framework – An Error Free Project Management Environment](#), in the PMI affiliated [projectmanagement.com](http://projectmanagement.com) (<https://www.projectmanagement.com/articles/330037/Project-Workflow-Framework--An-Error-Free-Project-Management-Environment>)*

The article above provides the overview and explanation of how the project workflow framework works and achieves the established objectives.

*For more information, please visit my website [www.pm-workflow.com](http://www.pm-workflow.com)*

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## **Scope Change Control (P7)**

### **Purpose**

The project scope, as opposed to the product scope, is the work required to deliver the solution to the client. The product scope is the scope of the business solution, described in the Business Requirements Document. Any change in business requirements is a product scope change, which will lead to the change in the required project work. Usually, the project scope change term is used for business requirements changes.

The purpose of the Project Scope Change Control process (P7) is to manage changes to business requirements and design and their effects on the project. The P7 process is also used when changes are required in the project cost and schedule due to the project's poor performance. The Project Scope Change Control process ensures that:

- Changes are identified, analyzed, approved, planned and implemented.
- Project stakeholders are fully aware of all changes
- All Scope Change Requests are documented and the approved changes are entered into the project plan

The Scope Change Control process is activated when the request to issue a new Scope Change Request (SCR) is initiated by any of the following:

- Client's team member
- Delivery team member
- Any stakeholder
- Issue Management process
- Legally mandated requests

In order to get scope change analyzed, planned and implemented, the Scope Change Control process interacts with other processes in all project process groups (frames).

### **Scope Change Control Process**

The Scope Change Control process describes the interaction details between the delivery and client teams at the time when a project scope change is required.

It happens too often that clients directly request the delivery team members to implement scope changes, rather than following the scope change process. This is especially true, but no less insidious, when the scope changes are small. If team members accept it for implementation, the consequences of such requests – also called collectively “scope creep” - may be very grave and may cause one or more of the following problems:

- Undocumented changes that could have significant technical, business, safety, environmental, social, and/or legal implications.

- The scope change is implemented without the scope change requirements analysis.
- The cost of implementing the change is not covered by the existing budget.
- The implementation of the change is not incorporated in the project plan. Due to project dependencies many other project activities may slip the schedule or require extra work as a consequence of the changes. Even if the change takes only a few hours to implement, there may be many other project tasks delayed hours each. This delay may easily cascade and be multiplied several times in the overall effort to incorporate the change, causing significant overall project slippage. The later in the project cycle the change is requested, the greater the cost and the greater the overall impact to the project.
- If the impact of the scope change on other tasks and projects is not thoroughly investigated, this may affect not only the project, but the steady-state operation of the organization.

Therefore, the Project Scope Change process must be strictly followed by both the client and delivery team members. This must be made very clear to everybody. Rules for the enforcement of the Scope Change Process must be included in the Statement of Work. Also, the delivery team members must be specifically instructed not to accept new change requests or modifications from anybody except project manager or specifically authorized personnel.

Considering that some clients and delivery team members may find it difficult to follow the change request process flow chart at Figure 10-1, the following description attempts to resolve this potential issue. This description should be included in the Statement of Work. The process comprises the following steps:

1. The scope change must be identified, documented and submitted to Project Manager for approval using the SCR form. The SCR must identify all proposed changes to the project scope. If the scope change is identified by the business user or business manager, it must be reviewed by the lead client before submitting the SCR to a project manager. In the case the scope change is identified by a delivery team member or the delivery manager, the team lead will review the proposed scope change and make decision whether to proceed with the SCR or to reject it. If it is decided to proceed, then the SCR is submitted to a project manager. The SCR will be also initiated and submitted when a proposal is made to modify the project scope as part of a cost reduction or schedule issues in order to fit into the existing budget or schedule.
2. The SCR is reviewed by a project manager with the relevant delivery team members and the required effort to analyze the SCR is estimated. The SCR may be accepted for further evaluation, deferred to a later date or rejected. The SCR must be documented in the Project Control Book (PCB).
3. If the SCR is accepted, project stakeholders will be notified by the project manager. If the SCR is rejected, it is formally closed with reasoning behind the decision provided. If the SCR is deferred, no action is taken until the deferral date. At the deferral date, the

SCR is sent again to the project manager for approval and step 2 is repeated. The SCR status is documented in the PCB.

4. If the SCR is accepted, the budget for SCR analysis is submitted to the client for approval. If the scope change is small (the estimates of effort for SCR analysis are under 2 hours), the budget approval for SCR analysis is not required and step 5 will be skipped.
5. If the budget for the SCR analysis is approved by the client, the SCR status will be documented in the PCB and the SCR analysis will be performed. If the budget is rejected, the reason for rejection must be documented and the SCR is closed.
6. The SCR planning and implementation tasks are estimated, documented in the PCB, and the budget is submitted to the client for approval.
7. If the SCR planning and implementation budget is approved, it is documented in the PCB and the SCR is incorporated in the overall project plan. If the budget is rejected, the reason for rejection must be documented and the SCR is closed.
8. The project plan is updated to include the SCR into the schedule and the SCR is implemented in accordance with the project plan.
9. The completed SCR is closed. If serious issues or risks are discovered during planning or implementation, which jeopardize the SCR implementation, a new issue must be opened in order to mitigate the problem.

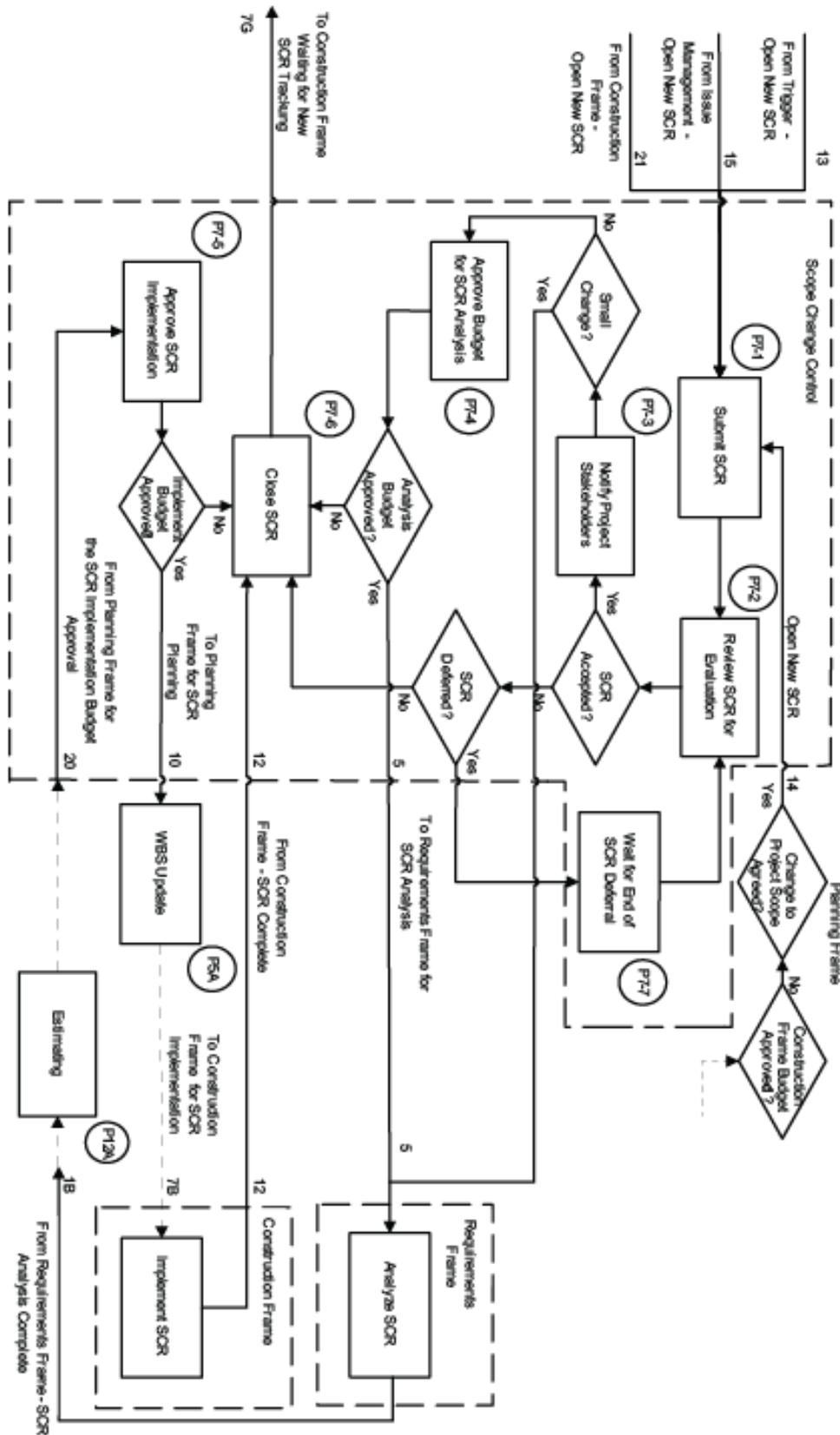


Fig 10-1 Scope Change Control

The only exception from this process is when the project falls behind the schedule due to client actions or inaction, such as a delay in signing off the project documentation or deliverables. In this case, no client approval is required and the SCR is sent to the client for information only. The client will have the opportunity to escalate the issue with delivery management. At the same time, project stakeholders will be notified by the project manager.

*Note: When a new SCR is added to the schedule, some organizations allow project managers to baseline the schedule. The baseline is a reference point, which is compared with the project actuals to determine the project health and perform the Earned Value Analysis. The project is usually baselined after the project plan and the budget are approved first and then after the new, more detailed estimates are made. From that moment we are able to track variances in the cost and schedule comparing them to a baseline target. We do not establish a new baseline after each change request, because this erases all old project tracking information. Even if a project was in a disastrous state, after establishing a new baseline it shows the project's perfect health with no variances in cost and schedule. Establishing a new baseline is allowed by senior management in exceptional cases. It is often allowed if there are too many change requests implemented and the Gantt Chart does not make any sense any longer.*

The Earned Value Analysis (EVA), as described in the book and using the available on [www.pm-workflow.com](http://www.pm-workflow.com) tool, must be performed before entering new SCR information into the schedule, and the second time after scheduling a Change Request, but before the beginning of its implementation. Before the second calculation, the Budget at Completion should be increased by the cost of the change request and the Planned End Date is extended by the scheduled time needed for the SCR implementation. Results of both EVAs must be identical. All the following EVAs will correctly reflect the project health.

The schedule, however, will show all tasks which were moved due to the SCR tasks as slipped - and the Gantt chart does not look pretty. To alleviate this, some project managers create a personal copy of the schedule and baseline it. The Gantt chart now may look pretty, but the slipping cost or schedule prior to a new baseline won't be displayed any longer. This personal copy of the schedule is just for reference and should not be shared with anybody.

## **Scope Change Control Process Flow**

The process flow moves across Initiation, Planning and Construction groups of processes (frames). The Scope Change Control, as shown in Fig 10-1, includes the following processes:

1. Submit SCR (P7-1)
2. Review SCR for Evaluation (P7-2)
3. Notify Project Stakeholders (P7-3)
4. Approve Budget for SCR Analysis (P7-4)
5. Approve SCR Implementation (P7-5)
6. Close SCR (P7-6)
7. Wait for the End of SCR Deferral (P7-7)

In addition to the above seven processes, there are several additional processes, which are logically a part of the Scope Change Control process, but physically located outside of this process and even outside of the Planning Frame.

Some of those additional processes are generic processes, such as the Estimating process, Build/Update WBS etc., which are used also in the scope change planning flows. The additional processes used for Scope Change Control are:

- Estimate SCR – Planning Frame
- Update WBS – Planning Frame
- Analyze SCR – Requirements Frame
- Implement SCR – Construction Frame

A Scope Change Control process is triggered via entry point 13, when business users or delivery team members initiate new SCR. If the initiator's team lead finds the SCR necessary, the Submit SCR process (P7-1) will be executed. Otherwise, no SCR is initiated and no further action is taken. P7-1 will also be executed in following cases:

1. The request for a scope change comes from the Planning Frame via entry 14, when the budget is not approved, but it is agreed to reduce the project scope in order to fit the project into the available budget and schedule.
2. The request for a scope change comes from the Issue Management planning via entry 15, when the issue cannot be resolved without changing the project scope.
3. The request for a scope change comes from the Construction or Closing Frames via entry 21, when project poor performance identified during tracking in the Construction Frame cannot be improved without a scope change and also if the defect found during testing cannot be fixed without scope change.

Once the SCR is submitted, the Review SCR for Evaluation process (P7-2) is executed. The SCR is reviewed with the delivery team members and it is either accepted, deferred or rejected. Also, the effort required for SCR analysis is estimated.

The first decision point question in the process flow after execution of P7-2 process is (SCR Accepted?). If the SCR is rejected or deferred, the answer is NO. The next decision point is (SCR Deferred?). If it is rejected, the answer is NO and the flow goes to Close SCR process (P7-6). If the SCR is deferred, the answer is YES and the waiting time countdown to the deferral date starts. At the end of the countdown the process flow returns to the Review SCR for Evaluation process (P7-2). A new decision is made whether to proceed with SCR, to defer it to a new date or to reject it.

If the SCR is accepted, the answer to the decision point (SCR Accepted?) is YES and the project stakeholders are notified in the process Notify Project Stakeholders (P7-3). The process comes to the next decision point (Small Change?).

If the estimated time for SCR analysis is under 2 hours, the answer is YES and the process flows to the Requirements Frame via entry point 5 for the SCR analysis without a prior SCR budget

approval. Otherwise, the SCR is not qualified as a small change and the answer is NO. The process flow enters the Approve Budget for SCR Analysis process (P7-4). If the analysis budget is not approved, the answer to the decision point (Analysis Budget Approved?) is NO and the SCR is closed in the Close SCR process (P7-6).

If the SCR analysis budget is approved, the answer is YES and the process flow is directed to the Requirements Frame for SCR analysis via exit point 5. When the SCR analysis is completed, the flow goes back to the Planning Frame via entry point 1B for planning and estimating the SCR and then back to the Scope Change Control via entry point 20 to the Approve SCR Implementation process (P7-5).

If the implementation budget is not approved, the answer to the decision point (Implement. Budget Approved?) is NO and SCR is closed in the process Close SCR (P7-6). Otherwise, the process goes to the Planning Frame for the WBS update in order to incorporate the SCR implementation plan into the existing project plan. From there the flow goes to Construction Frame for SCR implementation and tracking. When the SCR is implemented, the process flow goes back to the Close SCR process P7-6 for SCR closing via entry point 12.

### Submit SCR (P7-1)

When a change to the existing project scope is identified, the SCR is submitted to the project manager, using the SCR form. The SCR must be submitted in order to do any of the following:

- Change one of the existing requirements or design/technology
- Add a new requirement
- Delete an existing requirement
- Change earlier estimates or schedule, even if existing requirements are not affected

Even if the scope change is very small, and can be implemented in minutes without additional charges to client, the SCR still must be submitted in order to avoid potential issues described earlier in this section.

Table 10-1A

Project Name: _____	SCR #: _____ Requirement ID: _____
<b>Part 1: SCR Initial Request</b>	
Priority:    Must have <input type="checkbox"/> Should have <input type="checkbox"/> Nice to have <input type="checkbox"/>	
Priority Justification:	
Submitted by (name): _____ <input type="checkbox"/> Delivery Team <input type="checkbox"/> Business Team <input type="checkbox"/> Other Stakeholder	
Short Description of SCR:	
The SCR Justification:	

Dependencies on other activities or projects:
Impact to other activities or projects:
Last Update Date: _____
Detailed SCR Description (Include attachments, if necessary):
Signature: _____ Original Issue Date: _____

Before the SCR is submitted to a Project Manager, Part 1 of the SCR, which is shown in Table 10-1A, must be filled out by the initiating team lead. Part 1 of SCR has the following fields:

1. **Project Name:** This is the officially documented project name.
2. **SCR #:** Since the project manager is the one who keeps track of all sequential SCR numbers; he/she will enter SCR# after receiving it for review.
3. **Requirements ID:** This is the reference to the requirements identifier as documented in the Traceability Matrix. The requirements identifier consists of three parts separated by dashes: Project ID, Baseline Requirement Identifier as documented in the Business Requirements Document and the Revision Identifier. If, for example, the Traceability Matrix refers to requirements identifier CLI00253-001-02, where 02 is the last revision identifier, then the new Requirements ID will be CLI00253-001-03, where old revision 02 is replaced with the new revision 03. If the SCR is related to a design or technology change, this field should be left blank, since no design elements are included in the Traceability Matrix.
4. **Priority:** Check the SCR priority (must have, should have or nice to have, as described in the Initiation Section of the book).
5. **Submitted by:** The name of the person who submitted SCR, and a corresponding checkmark for the group to which he/she belongs ( Delivery team, Business team or other Stakeholder)
6. **Short Description of SCR:** This is the one line description which provides a hint to what the SCR is about.
7. **The SCR Justification:** Justify the need for SCR.
8. **Dependencies on other activities or projects:** If the SCR cannot be implemented until another activity or project is complete, it must be stated here.
9. **Impact to other activities or projects:** If the requestor is able to do the Impact Analysis of the SCR in order to determine the impact of the SCR on other activities or projects, it must be stated here. It is project manager's responsibility to ensure that the Impact Analysis is performed and documented by qualified personnel before beginning the SCR implementation.
10. **Last Update Date:**
11. **Detailed SCR Description** (Include attachments, if necessary):
12. **Signature:**
13. **Date:**

## Review and Accept SCR for Evaluation (P7-2)

When Part 1 of the SCR form has been completed by the requestor and received by the PM, an identification number is assigned to the SCR.

The project manager will review the SCR with delivery team members and determine whether to accept, reject or defer the SCR review to the specific date in the future. The delivery team members will estimate the cost of SCR Analysis. The PM will fill out Part 2 of the SCR, as shown in Table 10-1B and file it in the Project Control Book (PCB).

Table 10-1B

<b>Scope Change Request (SCR)</b>	
Project Name: _____	SCR #: _____ Requirement ID: _____
<b>Part 2: SCR Acceptance for Further Review</b>	
SCR Accepted <input type="checkbox"/> SCR Rejected <input type="checkbox"/> Deferred <input type="checkbox"/> until _____ SCR is small <input type="checkbox"/> SCR is for design change <input type="checkbox"/> Est. Analysis Cost _____    Date: _____ Name: _____    Signature: _____	
Comments:	

In those organizations where the electronic sign off process is implemented, the SCR is an electronic document, which is electronically signed and electronically distributed. If the electronic sign off process is not used, than the paper version of SCR must be completed and signed off manually. In this case, the electronic copy of the SCR without electronic signature still must be stored in PCB and the project manager must also keep the paper version with the signature. It is also possible to scan the signed copy of the document and store it in the PCB, but the original must still be kept until the end of the project. Part 2 of SCR has the following fields:

1. **SCR Accepted** checkmark. This is checked when SCR is accepted for further evaluation.
2. **SCR Rejected** checkmark. This is checked if SCR cannot be justified or not necessary.
3. **SCR Deferred** checkmark with the deferral date. This is checked when SCR is put on hold until the date indicated in the “until” field.
4. **SCR is small** checkmark. Description of the small vs large scope change is provided below.
5. **Est. Analysis Cost.** This is the estimated cost of SCR analysis and the impact analysis.
6. **Date.** This is the Date of SCR acceptance for further evaluation.
7. **PM Name.**
8. **PM Signature.**
9. **Comments.** This field must provide detailed explanation if the SCR was rejected or deferred. Other comments are optional.

The overall guidelines to indicate small scope change are:

- Small scope change takes up to eight hours of labor to accomplish.
- Small scope change must not present any additional risks to the project.
- Small scope change does not add new stakeholders or business users.
- For small scope change, the SCR impact analysis performed in the Scope Change Control (P7) process indicates that nothing else in the project or outside of it is affected by the change.
- No new issues are created as the result of a small scope change.

Small and large scope change use different sequence of processes to implement the change request, as described in the book.

All fields are filled out by the project manager. In cases of SCR rejection or deferral, the reason must be recorded in the Comments field. If the SCR requires further clarification, it must be deferred until such clarification is received.

### **Notify Project Stakeholders (P7-3)**

Project stakeholders are identified and listed during Communication Planning. Based on this list, notifications of new SCR will be sent to all people on the list with the copy of an SCR attached. Here are some key reasons why stakeholders should be aware of every SCR:

1. In any project where several business areas are involved, the SCR, which is initiated by one business area, may not be acceptable to other business areas.
2. Often, the frequency of the client-initiated SCRs increases in later stages of the project. This happens because clients can see the product outline better towards the end of the project and want a fine tuning of the requirements. Since each SCR raises the cost of a project and changes the schedule, clients' managers must be fully aware of changes in the project cost and schedule. This also causes clients to have better justification for each SCR and filter out those changes which are not absolutely necessary.

### **Approve Budget for SCR Analysis (P7-4)**

Having parts 1 and 2 of the SCR filled out, the project manager sends the SCR to the client for approval of the SCR Analysis budget, unless the analysis effort estimates are less than 2 hours. The client may accept the cost or reject it. The client fills out remaining fields in part 3 of SCR, as displayed in Table 10-1C and returns it to the project manager. Part 3 of the SCR has the following fields:

1. **Approved for Analysis** checkmark. This is checked when the cost of SCR analysis, which includes impact analysis, is approved by the client.
2. **Est. Analysis Cost**. This is the estimated cost of SCR and impact analyses, which is provided by the project manager.
3. **Rejected** checkmark. This is checked if the client does not want to proceed any further with the SCR.

4. **Date.** This is the Date of SCR acceptance for further evaluation.
5. **Authorized by** – The name of the person, who approved the cost of analysis.
6. **Signature.**
7. **Comments.** This field must be filled out if the SCR analysis is rejected. The reason for rejection must be clearly explained. Other comments are optional.

All fields must be filled out by the authorizing client.

Table 10-1C

<b>Scope Change Request (SCR)</b>	
Project Name: _____	SCR #: _____ Requirement ID: _____
<b>Part 3: SCR Analysis Approval</b>	
Approved for Analysis <input type="checkbox"/>	Est. Analysis Cost _____
Analysis Rejected <input type="checkbox"/>	Date: _____
PM Name: _____	PM Signature: _____
Comments:	

SCR Analysis will also evaluate the impact of implementing the scope change on other project components and deliverables, as well as provide estimates for SCR analysis. When evaluating the impact, the following must be taken into consideration:

- Project risk, schedule, quality, cost and resources
- Long-term, product oriented, steady-state product and operations focused effects
- Other project requirements that may be affected by the SCR
- Changes, caused by the SCR to other projects and existing products
- SCR effect on earlier commitments to and by affected teams and subcontractors

Estimates and Impact Analysis must be documented in the PCB.

### **Approve SCR Budget for Implementation (P7-5)**

A project manager enters estimated SCR implementation cost in the corresponding field of the SCR part 4, as shown in Table 10-1D, applies his/her name and signature, then sends the SCR to the client for implementation budget approval. If the client approves the budget, then the SCR is sent back to the project manager and the process flow goes to the Planning Frame, P5A process to incorporate the scope change implementation plan into existing Work Breakdown Structure. Part 4 of the SCR has the following fields:

1. **Estimated Implementation Cost.** This the estimated cost of SCR implementation, which should include also costs of other project changes as result of the SCR implementation.
2. **Estimated Schedule Impact.** This is the estimated delay in the project implementation due to the SCR. This is not the duration of the SCR implementation, but rather the

difference between planned project duration before the SCR and after the SCR is completed.

3. **PM Name.** This is the project manager’s name.
4. **PM Signature.**
5. **Approved for Implementation** checkmark. This is checked when the cost of SCR implementation is approved by the client.
6. **Date.** This is the approval date.
7. **Rejected** checkmark. This is checked if the client does not want to implement the SCR.
8. **Name.** This is the name of the approver.
9. **Signature.** This is the approver’s signature.
10. **Comments.** This field must be filled out if the SCR implementation is rejected. The reason for rejection must be clearly explained. Other comments are optional.

The new SCR status must be documented in the Project Control Book (PCB).

Table 10-1D

<b>Scope Change Request (SCR)</b>	
Project Name: _____	SCR #: _____ Requirement ID: _____
<b>Part 4: SCR Implementation Approval</b>	
Estimated Implementation Cost: _____	
Estimated Schedule Impact: _____	
PM Name: _____ PM Signature: _____	
Approved for Implementation <input type="checkbox"/> Date: _____	
Rejected <input type="checkbox"/>	
Name: _____ Signature: _____	
Comments:	

### Close Change Request (P7-6)

When the SCR implementation is complete, the notification comes from the Construction Frame via entry point 12. The project manager fills out part 5 of the SCR, shown in Table 10-1E indicating SCR completion. Part 5 of the SCR has the following fields:

1. **Date.** This is the date of the SCR closeout.
2. **Actual Schedule Impact.** This is the actual delay in the project implementation due to the SCR.
3. **Actual Cost.** This is the actual cost of SCR planning and implementation.
4. **PM Name.** This is the Project Manager’s name.
5. **PM Signature.**
6. **Comments.**

The change request is closed when the SCR is completed. All updated documentation is filed in the PCB.

Table 10-1E

<b>Scope Change Request (SCR)</b>	
Project Name: _____	SCR #: _____ Requirement ID: _____
<b>Part 5: SCR Close-out</b>	
<b>Changes are completed and SCR is closed.</b> Date: _____	
Actual Schedule Impact: _____	Actual Cost: _____
Name: _____	Signature: _____
Comments:	

### **Wait for the End of SCR Deferral (P7-7)**

This process is the timer set for the duration of SCR deferral. As soon as the time is up, the process flow returns to the process P7-2 to review the same SCR again.

### **Scope Change Process Metrics**

The project scope change process has the following measurements:

1. Plan versus actual date and effort for completion of each SCR investigation and implementation
2. Cost of each SCR planning and implementation
3. Schedule impact of each SCR
4. Accumulated costs of all SCRs and SCRs grouped by requirements and design changes
5. Accumulated schedule impact of all SCRs and SCRs grouped by requirements and design changes
6. Number of approved changes to each documented requirement
7. Number of approved design and technology changes
8. Total number of approved and rejected changes by SCR requestor

## About the Author



### **Dan Epstein**

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**Dan Epstein** combines over 25 years of experience in the project management field and the best practices area, working for several major Canadian and U.S. corporations, as well as 4 years teaching university students project management and several software engineering subjects. He received a master's degree in electrical engineering from the LITMO University in Leningrad (today St. Petersburg, Russia) in 1970, was certified as a Professional Engineer in 1983 by the Canadian Association of Professional Engineers – Ontario, and earned a master's certificate in project management from George Washington University in 2000 and the Project Management Professional (PMP®) certification from the Project Management Institute (PMI®) in 2001.

Throughout his career, Dan managed multiple complex interdependent projects and programs, traveling extensively worldwide. He possesses multi-industry business analysis, process reengineering, best practices, professional training development and technical background in a wide array of technologies. In 2004 Dan was a keynote speaker and educator at the PMI-sponsored International Project Management Symposium in Central Asia. He published several articles and gave published interviews on several occasions. In the summer of 2008 he published "Methodology for Project Managers Education" in a university journal. His book, *Project Workflow Management - The Business Process Approach*, written in cooperation with Rich Maltzman, was published in 2014 by J. Ross Publishing.

Dan first started development of the Project Management Workflow in 2003, and it was used in a project management training course. Later this early version of the methodology was used for teaching project management classes at universities in the 2003–2005 school years. Later on, working in the best practices area, the author entertained the idea of presenting project management as a single multithreaded business workflow. In 2007–2008 the idea was further refined when teaching the project management class at a university. Since 2009, Dan has continued working full time in Project Management. Dan Epstein can be contacted at [dan@pm-workflow.com](mailto:dan@pm-workflow.com).