

Using DSDM with PRINCE2

Table of Contents

1	INTRODUCTION.....	2
1.1	AUDIENCE.....	3
1.2	CONTRIBUTORS.....	3
2	PRINCE2 AND DSDM COMPARISON	4
2.1	PHILOSOPHY.....	4
2.1.1	<i>PRINCE2</i>	4
2.1.2	<i>DSDM</i>	4
2.2	POSITIONING	5
3	ISSUES AND GUIDELINES FOR OVERLAPPING AREAS.....	6
3.1	PROJECT STRUCTURE.....	6
3.1.1	<i>Starting</i>	6
3.1.2	<i>Running</i>	7
3.1.3	<i>Stopping</i>	7
3.1.4	<i>Scenarios</i>	7
3.2	ROLES AND RESPONSIBILITIES.....	9
3.2.1	<i>Project Board</i>	9
3.2.2	<i>Executive</i>	9
3.2.3	<i>Senior User</i>	10
3.2.4	<i>Senior Supplier</i>	11
3.2.5	<i>Project Manager (PM)</i>	11
3.2.6	<i>Team Manager</i>	11
3.2.7	<i>Project Support</i>	11
3.2.8	<i>Project Assurance</i>	12
3.3	PRODUCTS.....	12
3.3.1	<i>Project Initiation Document</i>	13
3.3.2	<i>Feasibility Report</i>	14
3.3.3	<i>Outline Plan</i>	14
3.3.4	<i>Business Area Definition (including Prioritised Requirements List)</i>	14
3.3.5	<i>Outline Prototyping Plan, PID, and Stage Plan</i>	14
3.3.6	<i>Implementation Strategy</i>	15
3.3.7	<i>Development Risk Analysis Report</i>	15
3.3.8	<i>Project Review Document</i>	15
3.3.9	<i>The Quality Log and Prototype Review Records</i>	15
3.4	MANAGEMENT AND CONTROL	15
3.4.1	<i>Purpose</i>	15
3.4.2	<i>Controls in a PRINCE2 Project</i>	16
3.4.3	<i>Controls in a DSDM project under PRINCE2</i>	16
3.5	TOLERANCE AND EMPOWERMENT	17
3.6	CHANGE MANAGEMENT.....	18
3.7	QUALITY	18
3.8	RISK.....	19
4	SUMMARY AND CONCLUSIONS.....	20

1 Introduction

Today's business environment demands shorter time to market for new products and services along with early benefit realisation. Projects are often undertaken on a collaborative basis and commence without a detailed understanding of the requirements. In this commercial environment it is no surprise that the use of DSDM, as the publicly available best practice method for Rapid Application Development, is showing significant increase.

PRINCE2 (Projects in Controlled Environments)¹ similarly provides non-proprietary best practice. It is a project management method that was specifically designed to be generic and independent of any particular project type or development method. As with DSDM, its use is dramatically on the increase in both the public and private sectors.

As a development method and a project management method, the two should be complementary. Some have perceived the *dynamic* emphasis of DSDM and the *control* emphasis of PRINCE2 to be in conflict. However, this is not the case. When DSDM was being developed, those involved had PRINCE firmly in mind. This is reflected in a number of the DSDM principles and techniques – for example, product-based planning, the involved partnership of users and developers, and the strong emphasis on the underlying business case.

Care is needed, however, in using the two methods together. Those who have used PRINCE2 to control their DSDM projects have found that an unheeding approach - applying the method straight from the manual - can lead to duplication, overlap and conflict. Figure 1 highlights the elements of both methods that overlap or are specific to each.

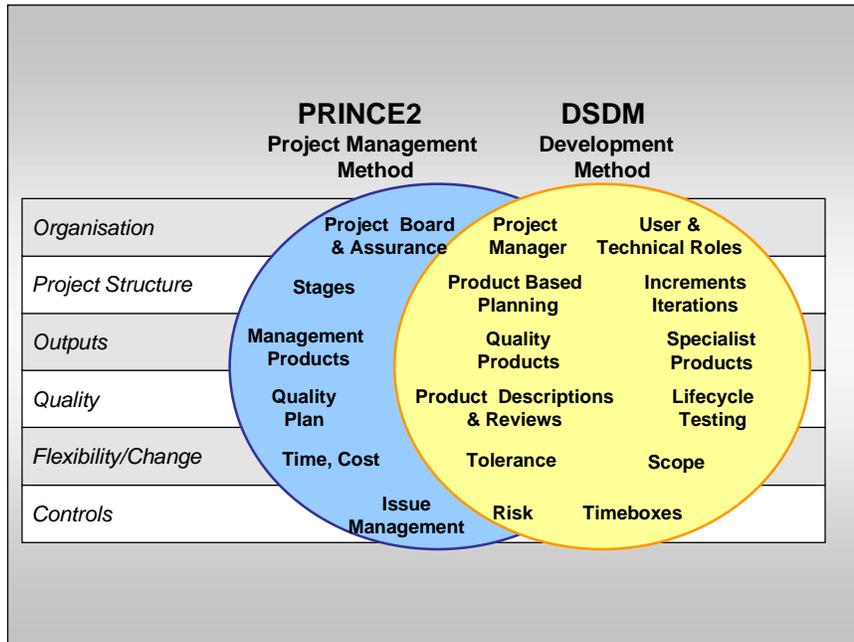


Figure 1. PRINCE2 and DSDM Positioning

Figure 1 makes clear that DSDM itself includes some project management content. It was consciously designed to provide just sufficient capability to allow effective management of DSDM projects. However, it is recognised that some businesses may choose to use a PRINCE2 framework to manage all their projects, including those using DSDM. This White Paper shows how the careful and tailored application of DSDM and PRINCE2 can create a synergy that results in a dynamic and controlled successful project outcome. It provides a summary of the common features of both methods and an analysis of those areas where conscious decisions appropriate to each project and each organisation will have to be made.

1.1 Audience

This White Paper is primarily aimed at project managers. For them, it provides clear and concise information and guidance on the specific areas of each method that will require tailoring to their project/organisation characteristics.

The emphasis is on practical guidance, assisting project managers to make appropriate decisions with the following objectives:

- to avoid overlap and streamline the use of both methods
- to eliminate duplication of effort and any unnecessary paperwork
- to ensure effective controls on a project where change is expected

Others who will benefit from this White Paper are:

- methods and process consultants, tasked with the successful adoption of either or both methods into their organisation.
- senior management and members of the Project Board who need to understand how their responsibilities and the controls of PRINCE2 are adapted to remain effective in the “empowered” environment of a DSDM project

1.2 Contributors

This paper has been produced from contributions made by members of the DSDM with PRINCE2 Task Group. The members of the task group are:

Mike Griffiths	Independent Consultant
David Harrison	Ordnance Survey
Mark Hartell	FI Group
George Hay	CMG UK Limited (Task Group Chair)
Amanda Kent	DHL Systems
Steve Messenger	Napp Pharmaceutical Holdings Ltd.

2 PRINCE2 and DSDM COMPARISON

2.1 Philosophy

Although PRINCE2 and DSDM address different (yet complementary) areas, their philosophies are remarkably similar. Perhaps this should come as no surprise: as stated in the Introduction, those involved in the initial development of DSDM were familiar with PRINCE (the forerunner of PRINCE2).

2.1.1 PRINCE2

PRINCE2 is intended to be a generic method, suitable for managing any kind of project (not just IT projects). It takes the view that successful projects require visible control, and therefore provides them with an organised start, middle, and end. It divides projects into a number of management stages that provide flexible event-driven review and decision points. PRINCE2 is sufficiently adaptable to work with DSDM without requiring too much bureaucracy.

PRINCE2 is rooted in the business of which the project is a part. Every project is based on a business case. It is performed for the users by the suppliers for the benefit of the business. PRINCE2 sees active user and supplier involvement in the project as essential and defines this formally.

PRINCE2 defines a structure for authority, delegation, and decision-making. It also defines the communication channels between the project team, the project board, and the rest of the organisation. Management of the project is by exception. There is automatic management control for deviations from the agreed project plan. The project manager works under delegated authority and within defined and agreed tolerances to undertake day to day project management and deliver the project.

Project progress and status are best measured by tangible results. Project planning is therefore based on products and outcomes, rather than the tasks and activities required to produce them.

PRINCE2 views effective change control as essential to successful project delivery. It recognises that change is inevitable and manages changes as issues.

Finally, PRINCE2 is a framework for project management. Tailoring it to the organisation and the project in hand is critical to its success.

2.1.2 DSDM

DSDM's philosophy is rooted in its nine principles, many of which are implicit in the above discussion of PRINCE2. Like PRINCE2's predecessor, PRINCE, DSDM began life as a method for IT projects. It was initially conceived as an IT development framework and therefore includes just sufficient project management content to allow effective management of DSDM projects. However, as DSDM has established itself, it has also evolved into a more generic framework applicable to non-IT areas of the business. This is evident from a glance at the range of DSDM White Papers that have been published and are planned.

DSDM's flexible life cycle and the products delivered at each stage provide visibility of progress and the ability to monitor the project through frequent deliverables. DSDM breaks development into increments, within which it uses timeboxing and prototyping controls to control time and cost. DSDM can work under PRINCE2 without creating too much overhead.

Like PRINCE2, DSDM is a business-driven approach. Fitness for business purpose is the key criterion for acceptance of all DSDM products. Active user involvement and a co-operative and collaborative approach from all stakeholders are essential components.

The DSDM project structure matches the PRINCE2 model. Under it, DSDM teams are empowered to work together, with team members fulfilling clearly defined roles and responsibilities. Communication is recognised as a core skill for all DSDM team members. The specific DSDM role of Ambassador User recognises the importance of communication between the development team and the users in the rest of the organisation. Like PRINCE2, DSDM uses the concept of tolerance. However, in DSDM projects, tolerance is on scope rather than on the more traditional time and resource.

DSDM also uses product based planning in the same way as PRINCE2, considering and specifying quality criteria to be satisfied by every product before it is built. In fact, the descriptions of the DSDM standard products in the manual are generic PRINCE2 specialist product definitions.

DSDM views change control as essential. Like PRINCE2, it recognises that change is inevitable. DSDM views this as a positive opportunity. It uses prioritisation and the concept of a minimum useable subset to focus on the needs of the business. It enables change against requirements that are baselined at a high level and evolve as the project progresses. Since iterative and incremental development is used as the approach to converge on a solution that satisfies business needs, DSDM requires that all changes during development should be reversible. A further characteristic of DSDM that distinguishes it from many other development approaches is its principle that testing is performed throughout the lifecycle.

Finally, like PRINCE2, DSDM is a framework. It is intended that every project, during the feasibility study, should tailor the DSDM approach to meet both the needs of the organisation and those of the project most effectively. "You can use some of DSDM all of the time, and all of DSDM some of the time".

2.2 Positioning

This White Paper recommends a general approach to combining PRINCE2 and DSDM. Where there is no overlap between the methods, refer to the PRINCE2 or DSDM manual as appropriate. In general, this means that project management related issues will be handled by PRINCE2 and development related issues by DSDM. The remainder of the White Paper focuses primarily on the overlapping areas.

3 Issues and Guidelines for Overlapping Areas

3.1 Project Structure

The definition and management of stages is a project management activity. PRINCE2 should therefore be the dominant method, as it is a project management method, intended for all types of project, whereas DSDM is a rapid application development method. For an organisation using PRINCE2 for IT, this ensures commonality between DSDM and other types of projects.

PRINCE2 mandates a minimum of two stages, of which one must be the initiation. The total number of stages used is then a matter of judgement for the project management team, for DSDM projects as for any other kind.

3.1.1 Starting

The early stages of PRINCE2, Start Up and Initiation, overlap with DSDM's Feasibility Study and Business Study. The products therefore require rationalisation.

Both methods have a major control point after an initial understanding of the project has been gained:

- end of Initiation (with Project Initiation Document and Plan) for PRINCE2
- end of the Business Study (with Business Area Definition, System Architecture Definition, and Outline Prototyping Plan) for DSDM.

Both are points at which a decision to proceed must be confirmed, and the option of abandoning project must be considered. However, the level of analysis required by the Business Study is much greater than in a PRINCE2 initiation and takes us deeper into the project. The Business Study involves the effort of the full team, albeit for a short period, which might not be the case in a PRINCE2 initiation.

Both methods also have an earlier, less critical, control point that is sometimes omitted:

- the Start Up (Products: Project Brief and Approach) for PRINCE2
- the Feasibility Study (Products: Feasibility Report, optional Feasibility Prototype, Outline Plan) for DSDM, which is sometimes combined with the Business Study.

These match very closely. However, a complication is that PRINCE2 recommends merging Start Up and Initiation for smaller projects. DSDM projects would frequently fall into this category, but a project might not be permitted to incur the cost of a Business Study without some earlier control point.

This White Paper therefore recommends that:

- the end of the Business Study in a DSDM project should always correspond to the end of a PRINCE2 stage
- the DSDM Feasibility Study phase should be incorporated into the PRINCE2 Start Up and Initiation

- there should always be two stages in a DSDM project before incremental development begins:
 - **Either** do PRINCE2 Start Up stage followed by a combined PRINCE2 Initiation and DSDM Feasibility and Business Study stage
 - **Or** do PRINCE2 combined Start Up and Initiation stage and DSDM Feasibility Study, followed by a DSDM Business Study stage

3.1.2 Running

PRINCE2 does not require management stages to match technical ones. A management stage may consist of a number of DSDM timeboxes. The number of stages required should be determined by balancing the amount of management control needed over the project and its risks against the potential overhead of managing stage boundaries.

The project management overhead in ending a stage and starting the next varies from organisation to organisation. If the overhead in your organisation is substantial, it might be wise to map a stage to an increment. If stage ending and starting is not a major exercise, then a stage might be mapped:

- to a phase (if all the functional model iteration is done before all the design and build iteration), or
- to the development of a functional area (where the functional model iteration and the design and build iteration are done in alternation).

DSDM Implementation is either simply a part of the increment (where this is treated as a single stage) or may be treated as one or more stages in its own right.

3.1.3 Stopping

At the end of the project, the PRINCE2 close down overlaps with the project review in the DSDM Implementation phase. However, the project review in DSDM is done in each increment and thus relates more closely to a PRINCE2 End Stage Assessment, of which the last happens to end the project. The key is tailoring the methods to do what is needed and no more, since in DSDM incremental acceptance has already taken place.

During early adoption of DSDM, the probability of and need for lessons learned information is heightened. To capture lessons learned, a full PRINCE2 close down is recommended in all cases.

3.1.4 Scenarios

The following scenarios are intended to illustrate the issues discussed above. Obviously, many more variations are possible, depending on the detailed circumstances.

- a) A small project, where only one increment is anticipated:
- Combined PRINCE2 Start Up and Initiation Stage (incorporating DSDM Feasibility Study)
 - DSDM Business Study Stage
 - Main Stage equal to increment (including project closure)
- b) A medium-sized project, still with only one increment, but high-profile and cash sensitive. Iterations of functional modelling are proposed to precede iterations of design and build for reasons of technical complexity:
- PRINCE2 Start Up
 - Combined Initiation and DSDM Feasibility Study / Business Study Stage
 - DSDM FMI Stage
 - DSDM DBI Stage
 - Implementation Stage (including project closure)
- c) A medium project, with three increments planned, and alternating FMI/DBI iterations:
- Combined PRINCE2 Start Up & Initiation Stage (incorporating DSDM Feasibility Study)
 - DSDM Business Study Stage
 - DSDM First Increment Stage
 - DSDM Second Increment Stage
 - DSDM Third Increment Stage
 - PRINCE2 Close Down
- d) A large project, with three increments, and alternating FMI/DBI:
- PRINCE2 Start Up
 - Combined Initiation and DSDM Feasibility Study / Business Study Stage
 - DSDM First Increment FMI/DBI Stage
 - DSDM First Increment Implementation
 - DSDM Second Increment FMI/DBI Stage
 - DSDM Second Increment Implementation
 - DSDM Third Increment FMI/DBI Stage
 - DSDM Third Increment Implementation
 - PRINCE2 Close Stage

3.2 Roles and Responsibilities

In any project, someone has to take responsibility for the following:

- defining the business requirement
- providing the budget
- providing the user and development resource
- authorising change
- defining standards and acceptance criteria
- managing the project to a successful conclusion
- signing off project deliverables

Depending on the size of the project, one or several individuals may assume these responsibilities.

Both PRINCE2 and DSDM support a project management structure in which there is a many to many relationship between the individual and the role, and there is a direct correspondence between many of the roles they each define. Both emphasise the importance of senior management commitment throughout the life of the project.

This section describes how the roles in DSDM (concerned with doing development) and PRINCE2 (concerned with managing the project) complement each other. Refer to the DSDM Manual for the full definition of DSDM roles.

Figure 2 illustrates the complementary nature of project roles in PRINCE2 and DSDM.

3.2.1 Project Board

PRINCE2 requires that a Project Board is appointed to provide overall direction and management of the project. The Project Board is not specifically required by DSDM, but it sits comfortably within the DSDM project framework.

The Project Board consists of three roles:

- Executive
- Senior User
- Senior Supplier

3.2.2 Executive

The PRINCE2 Executive maps directly to the DSDM Executive Sponsor and is ultimately accountable for the project to corporate and / or programme management. Throughout the project, the Executive “owns” the business case.

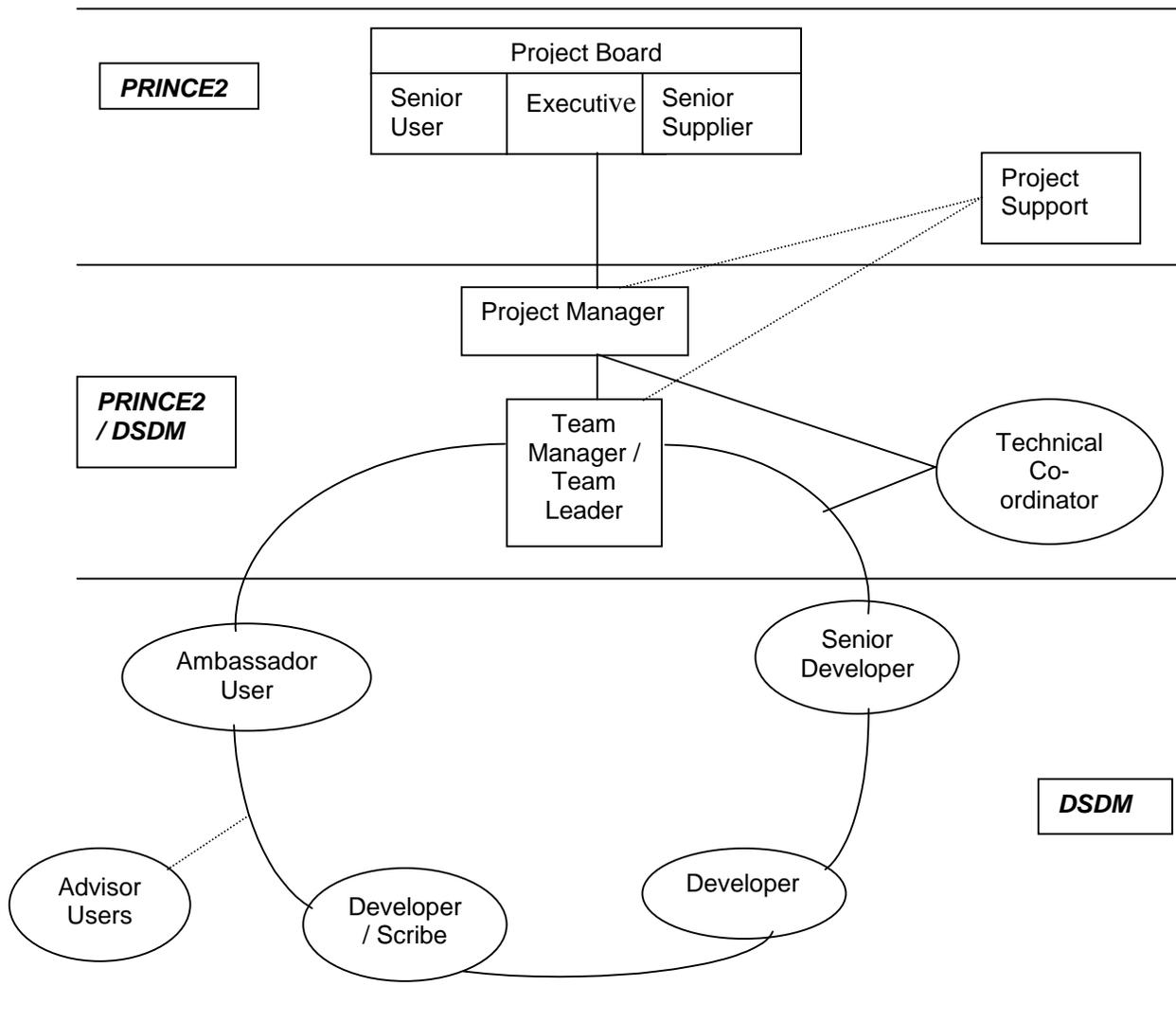


Figure 2. PRINCE2 and DSDM Combined Project Structure

3.2.3 Senior User

The PRINCE2 Senior User corresponds closely with the DSDM Visionary. In smaller projects, this may be the same individual as the Executive Sponsor. The Senior User is responsible for committing user resource to the project.

PRINCE2 suggests that this role may require more than one individual to cover all user interests, but warns that splitting the role may reduce its effectiveness. DSDM warns that lack of a clearly defined user group poses a risk to the project. In cases where a single Senior User is unable to represent all business areas, this White Paper recommends that:

- **either** each business area has its own Ambassador User in the project team, and they are empowered to work as a cross-area Ambassador User team with full support from their corresponding Senior Users

- **or** the user area driving the project (hence a single Senior User and a single Ambassador User from that area) represents all the affected business areas.

3.2.4 Senior Supplier

This is a PRINCE2 role and is not present in DSDM. The Senior Supplier represents the interests of those involved in building and deploying the products of the project.

At the Project Board level, the Senior Supplier:

- is accountable for the quality and timely delivery of the products, and for their fitness for business purpose
- commits or acquires the required supplier resources
- maintains good communication with the Senior User
- resolves escalated supplier issues that may put the project at risk

3.2.5 Project Manager (PM)

In both PRINCE2 and DSDM, the Project Manager is responsible for the successful delivery of the agreed products, to the agreed standard of quality, on time and within budget, and capable of delivering the benefits stated in the PID. The Project Manager may come from IT or the user community, and reports to the Project Board.

PRINCE2 focuses on the traditional Project Manager responsibilities. DSDM adds a complementary emphasis on:

- Empowering the project team
- Protecting the project team from outside interference
- Ensuring that the team can remain stable and focused throughout the project
- Managing user involvement in the project and ensuring users continue to be available when needed.

3.2.6 Team Manager

PRINCE2 defines this role in the context of larger projects, in which teams of different skills and knowledge are required or where a third party is doing work. For a smaller project using PRINCE2 and DSDM, the Team Manager role maps directly to the DSDM Team Leader role. This individual is responsible for ensuring that the development team meets its objectives by delivering the required system.

3.2.7 Project Support

An organisation may establish a Project Support Office to provide administrative support to the Project Manager, either because of the volume of work or to assist in the use of particular tools in the project (for example project management or configuration management tools). This could include providing the scribe and facilitator roles required by DSDM projects.

3.2.8 Project Assurance

PRINCE2 assigns project assurance functions to the Project Board members, and each member fulfils this role from his or her own perspective. The Project Board may delegate project assurance responsibilities to an independent Project Assurance Team (which may have been set up to carry out project assurance for any or all projects).

In DSDM projects, the Project Assurance Team may be redundant because of the far closer relationship and involvement of the business and users and the increased visibility offered by frequent deliverables. DSDM projects are often carried out to a fixed budget and decisions are always based on the business benefit.

The project assurance needs in DSDM projects can be effectively fulfilled, without compromising the PRINCE2 principle, by the Ambassador User and Technical Co-ordinator. In a project of any size, the Technical Co-ordinator is outside the core team. He or she is responsible for ensuring that the project is technically sound, meets its technical specification, and meets the agreed technical standards for the project itself and the organisation as a whole.

While the Ambassador User and possibly the Technical Co-ordinator are members of the core team, they should have direct access to the board if their assurance activities tell them that the Project Manager is steering the project away from the brief it has been given by the board. In this context, they are assuring that it is not the Project Manager who has a different agenda.

The important thing is to provide to the Project Board confidence that the project is indeed progressing well; that there are no hidden problems; and that it will deliver a product that is fit for business purpose at the agreed time.

3.3 Products

Products produced as part of the PRINCE2 process are *management* and *quality* products. They relate to the effective and efficient management and control of the project and to project quality, respectively. Most products within DSDM are *specialist* products. That is, they either contain information related to the system or development the project is to deliver or define the prototyping techniques and methods to be used. There are, however, some DSDM products that are either completely management products or contain project management sections (such as the outline plan and outline prototyping plan) and some DSDM quality products (such as review records and test records).

To avoid duplication of effort, the recommended approach is that management products should be the province of PRINCE2 and that any management elements within DSDM products should be stripped out and included in the appropriate PRINCE2 product. Similarly, duplication of effort in creating the quality products should be avoided.

Figure 3 shows the main products and the areas of overlap. It clearly shows the central position and importance of the Project Initiation Document. This document will be produced in all cases.

Perhaps it is not surprising that product descriptions in the DSDM manual are generic PRINCE2 product descriptions, since PRINCE concepts influenced the early

development of DSDM. This means that any existing DSDM templates in your organisation can probably be used as a basis for PRINCE2 product templates.

Figure 3 summarises the PRINCE2 and DSDM products. The remainder of this section concentrates on products where there is overlap and provides some guidance on how to handle them.

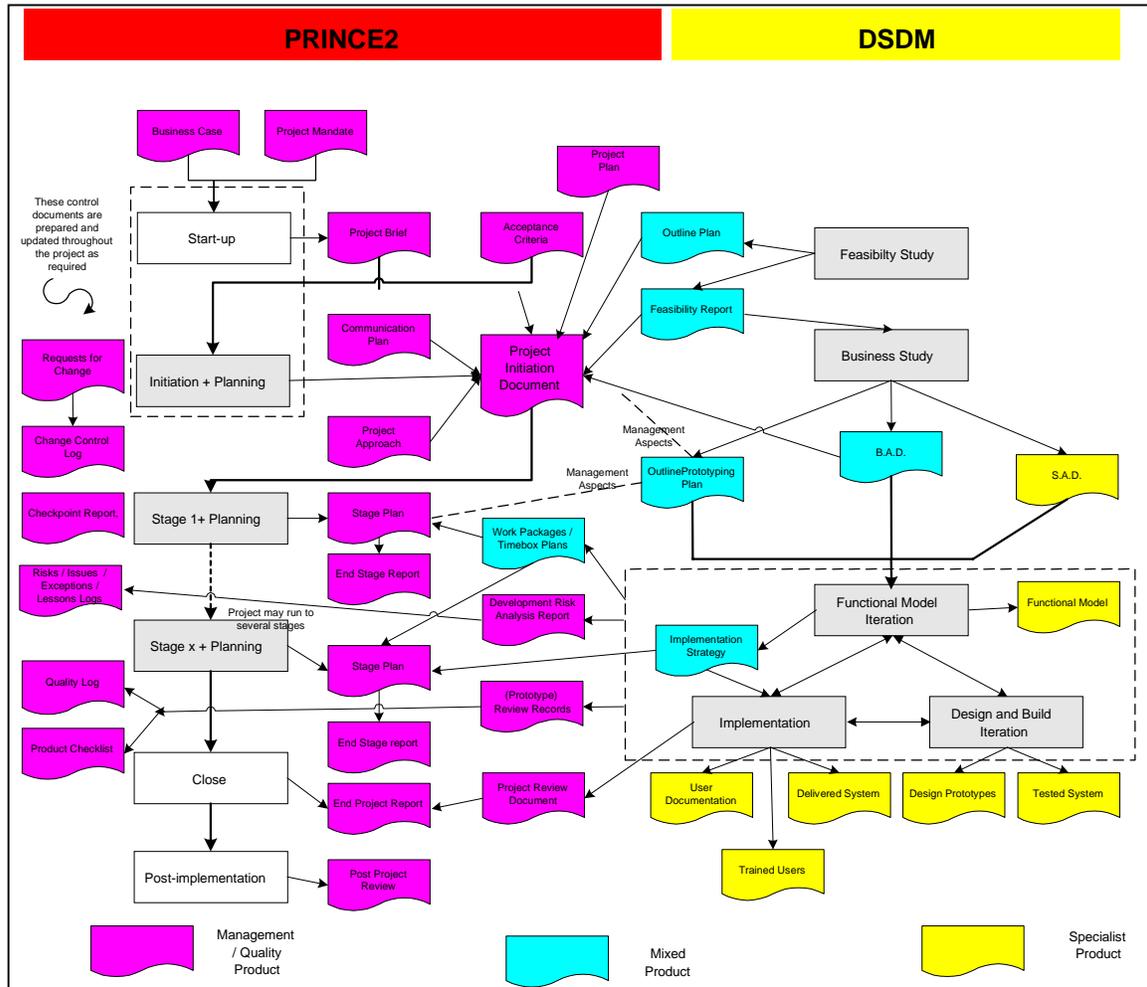


Figure 3. PRINCE2 and DSDM Products

3.3.1 Project Initiation Document

The production of the Project Initiation Document (PID) remains a key control point in the project. The PID will always be produced. It may contain the management aspects of the business study if the study is conducted at this time. If the Business Study is conducted following project initiation, the PID will only be able to define draft stages, since these will be confirmed as part of the Business Study. In this case, the PID should make a forward reference to the Outline Prototyping Plan, a product of the Business Study.

Since the Feasibility Study results in pure management products – the Feasibility Report and the Outline Plan – these documents will be subsumed into the PID. The Feasibility Prototype (an optional part of the Feasibility Report) is not a pure management product and may not be a document. In that sense, it cannot be subsumed into the PID, but could be referenced from it.

The PID should also address any DSDM specific management issues. For instance, the following would normally be covered in the Feasibility Report and should now be included in the PID:

- Preliminary indication of areas within scope which may be desirable but not essential;
- The need for team empowerment;
- Facilities that the development team will need;
- Any safety-related or product liability issues,
- Define tailoring of approach for the project
- Suitability Filter

3.3.2 Feasibility Report

This DSDM report will not be produced separately, but will be included in the Project Initiation Document.

3.3.3 Outline Plan

The points covered in the DSDM Outline Plan should be contained within the PRINCE2 Project and Quality Plan (and these documents may be part of the PID). Hence the Outline Plan is subsumed into these PRINCE2 documents and will not exist as a separate document.

3.3.4 Business Area Definition (including Prioritised Requirements List)

This is a DSDM document that covers both specialist and management aspects. Therefore, we recommend that this product should be created separately from PRINCE2 products, but that the management aspects should be extracted and included in the Project Initiation Document. Specifically, these include:

- The section relating to benefits, risks, costs and impact.
- Acceptance criteria.

3.3.5 Outline Prototyping Plan, PID, and Stage Plan

The Outline Prototyping Plan is produced in the Business Study in DSDM to define the main prototyping phases within the project. Whilst these do not equate directly to PRINCE2 stages (see section 3.1), they will probably help to define the stages –

something normally defined within the PRINCE2 Project Plan and the Project Initiation Document.

If the Business Study is carried out at the same time as the Project Initiation, then the stages defined by reference to the Outline Prototyping Plan can be included into the PID. If the Business Study follows initiation, then the stages defined within the PID and Project Plan will be draft, to be confirmed following the Business Study. This model in fact fits with both PRINCE2 and DSDM philosophies on planning, which recognise that planning is iterative and, at any stage, only the next stage is planned in detail (although overall time-scales are planned up front).

The Outline Prototyping Plan will remain as a key document within DSDM. Some aspects of it may be included in, or referenced from, the PRINCE2 Project Quality Plan.

3.3.6 Implementation Strategy

This relates closely to a PRINCE2 Stage Plan and will be incorporated into the appropriate one.

3.3.7 Development Risk Analysis Report

PRINCE2 suggests that a risk analysis is undertaken during the initiation stage and initial risks contained within the PID. The project then maintains a risk log, which both monitors and manages known risks and also records new risks. These mechanisms probably obviate the requirement for a separate DSDM Development Risk Analysis Report, although the specific risks with DSDM projects must be taken into account. This is discussed further in the section 3.8.

3.3.8 Project Review Document

The contents of the DSDM Project Review Document are contained within a PRINCE2 End Stage Report. It is also likely that the completion of an increment (which is the point at which the Project Review Document is written) will coincide with the end of a PRINCE2 stage. Therefore, the Project Review Document will probably be subsumed into the End Stage Report.

3.3.9 The Quality Log and Prototype Review Records

The PRINCE2 Quality Log, which records the invitations to and results from quality reviews, is the obvious place to store the DSDM Prototype Review Records. This is discussed further in section 3.7.

3.4 Management and Control

3.4.1 Purpose

Managing and controlling a DSDM project using PRINCE2 is fundamentally the same as for any other PRINCE2 project. The purpose is to enable each level of the project management team to:

- demonstrate to the next level up that the project is on track to a successful outcome, (that the project will deliver products that are fit for business purpose on time and within budget)
- identify early anything that may prevent this

To do this, there are mechanisms for controlling and tracking both the PRINCE2 aspects (project management) and the DSDM aspects (product development). The PRINCE2 and DSDM manuals deal with management and control in some detail. This White Paper describes how they fit together.

3.4.2 Controls in a PRINCE2 Project

Management and control are done at each project stage, and everything depends on how the project is broken up into stages. Refer to the earlier section 3.1.

PRINCE2 defines major control points through the life of the project, as follows:

- Project Initiation
- End Stage Assessment
- Regular Highlight Reports
- Exception Reports
- Mid-Stage Assessment
- Project Closure

3.4.3 Controls in a DSDM project under PRINCE2

The table below summarises this White Paper's recommended approach to controlling a DSDM project under PRINCE2. It is important to work within the spirit of DSDM, reducing the requirement for formal reporting to the minimum required to ensure fitness for purpose of the delivered system. Where appropriate, informal verbal or email highlight and checkpoint reports should be considered.

Control product	DSDM Phase	Decision / Action	Responsibility for decision
Feasibility Report	Feasibility Study	Go / no go	Project Board
Project Initiation Document (PID)	Feasibility Study or Business Study	Go / no go	Project Board
Suitability Filter	Feasibility Study and Business Study	DSDM / not DSDM	Project Board
Prioritised Requirements List	Business Study	Approve / not approve	Visionary, Ambassador User, Project Manager
Outline Prototyping Plan	Business Study	Approve / not approve	Project Board
Stage Plan	All stages (start)	Agree	Project Board
Development Risk Analysis Report	Functional Model Iteration	Approve / not approve	Project Board
Timebox Plan	Functional Model and Design and Build Iteration	Agree	Ambassador User, Team Leader
Prototype Review Record	Functional Model and Design and Build Iteration	Accept products	Project Manager, Quality Manager
End Stage Report	All stages (end)	Go / no go next stage	Project Board
End project report	Implementation (end)	Approve / not approve closure	Project Board
Exception Plan	Any stage when required	Approve / stop project	Project Board

3.5 Tolerance and Empowerment

Tolerance is defined as the measure of deviation that may be managed by the project manager before the project board must be consulted; that is, how far schedules can slip, budgets be overspent, or changes to scope appear before the project owners need to intervene.

PRINCE2 and DSDM both acknowledge that the project team must be empowered in order to work efficiently. A project will lose momentum if every minor change to functionality, budget or schedule needs external approval. Effective teams are entrusted to make decisions within the defined level of tolerance without reference to outside authority, allowing progress to be made more quickly.

Tolerance may be set on any measurable project attribute. Common examples are cost, functionality, and time. Tolerance on quality is not normally acceptable in traditional projects. In DSDM projects, the maintainability objective of “build now, re-engineer later” might be viewed by some as tolerance on quality; another view is that this is simply the way “fitness for purpose” is defined in the quality criteria for the product.

In DSDM, the principle “Fitness for business purpose is the essential criterion for acceptance of deliverables” applies. In DSDM projects, therefore, tolerance is on scope, rather than on time and resource (as in most traditional projects). During the FMI and DBI, this is managed by the concept of “minimum usable subset”, which requires that all “Must Have” requirements need to be met. Failure to deliver all “Must Haves” would be a breach of tolerance and necessitate the re-negotiation of scope. If the scope cannot be re-negotiated within the empowerment level of the team, then it is escalated to the project board as an exception

DSDM Feasibility and Business Studies are generally timeboxed. Scope tolerance in these phases is normally managed by limiting the depth to which the studies proceed, so that it is just sufficient to produce results that are fit for business purpose.

PRINCE2 recommends that tolerance is specifically defined in the Initiating a Project stage as part of creating the Project Initiation Document (PID). It is essential to define the tolerances for all the project stages in the PID. Tolerance can be on different variables and to different levels for each stage.

The principle of empowerment in DSDM projects has an impact on the level and frequency of involvement of the project board and the way it is run. For example, in order to avoid delaying the development process, the board may need to make more frequent quick decisions on escalated issues rather than wait for a regular scheduled meeting. This is completely in line with the PRINCE2 concept of management by exception. It may be possible to resolve some escalated issues without recourse to the full board. For example, supplier side problems with a specialist resource could be resolved through discussion with the senior supplier. Board involvement would only be needed if the tolerance will be exceeded.

3.6 Change Management

In a DSDM project, change within the high level scope and requirements defined in the Business Study is expected. Exception reporting will only be needed where change is beyond this tolerance.

This White Paper recommends that the project make use of the PRINCE2 Issues Log. The Project Board will need to be clear, at each stage of the project, which elements of the project should be subject to change control as opposed to being dealt with within the project team on a day to day basis. This information, along with details of any delegated change authority, should be documented in the PID or individual stage plans.

3.7 Quality

The approach to quality in both DSDM and PRINCE2 is very similar. Both suggest that quality is based on pre-determined quality criteria, formulated to ensure conformance to User Requirements (fitness for purpose) both for the project and for each product the project delivers. Both also promote the review of products against their quality criteria.

Both also recommend assurance activities to ensure the appropriate quality standards are being followed. DSDM requires that all reviews and assurance activities “add value” to

the process and are not for documentation's own sake (introducing unnecessary delays). It also points out that, although the review processes for products are similar, there are probably fewer products than in traditional projects.

The PRINCE2 Quality Log should be maintained as the main way of tracking quality (see section 3.3.9).

The DSDM Manual and the White Paper on Quality Management include valuable guidance on quality issues.

3.8 Risk

The PRINCE2 risk management approach forms the basis for managing project risks. The specific DSDM risks identified in the Manual and White Paper on Risk Management need to be considered. Where appropriate, facilitated workshops may be used to identify risks and plan approaches to addressing them.

The DSDM Development Risk Analysis Report is equivalent to the PRINCE2 Risk Log. It is developed in an ongoing fashion and reported specifically at the end of the Functional Model Iteration.

Identifying relevant risks and planning how to address them is an important part of planning for each timebox in DSDM. For further details, see the DSDM White Paper on Risk Management.

4 Summary and Conclusions

The philosophies and approaches of PRINCE2 and DSDM have much in common. As a consequence, it is possible to run DSDM projects under PRINCE2 without major conflict. To gain maximum benefit and synergy when doing this, it is important to avoid duplication of effort and increased bureaucracy by merging products and roles where indicated rather than duplicating them. The basic principle is to use each method to address the areas that it alone defines (primarily project management in the case of PRINCE2 and primarily development in the case of DSDM). The overlapping areas need to be handled with care, based on the guidance in section 3 of this White Paper.

Above all, the project manager who is about to embark upon a DSDM project under PRINCE2 needs to study and refer to the manuals for both methods and to tailor and scale each method to meet the needs of the project and the culture of the organisation.

ⁱ See “Managing Successful Projects with PRINCE2” by the CCTA (Central Computer and Telecommunications Agency), published by Her Majesty’s Stationery Office, 1998 (ISBN 0 11 330685 7)