University of Manitoba
Student Implementation System (SIS)
Project Definition

Prepared by: UM PM Team
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{Disclaimer specific to project, if any}. 
# Table of Contents

EXECUTIVE SUMMARY .................................................................................................. 4

1. INTRODUCTION ................................................................................................... 5
   1.1. MISSION ....................................................................................................... 5
   1.2. OBJECTIVES .............................................................................................. 5
   1.3. BENEFITS .................................................................................................... 5
   1.4. HISTORY AND/OR BACKGROUND ............................................................. 6
       1.4.1. Feasibility Recommendations ............................................................... 6

2. PROJECT SCOPE ................................................................................................ 6
   2.1. OVERALL .................................................................................................... 6
   2.2. SCT BANNER .............................................................................................. 7
   2.3. RELATED SCOPE ......................................................................................... 7
   2.4. OUT OF SCOPE ........................................................................................... 8
   2.4. PLANNED PROCESS IMPROVEMENTS ......................................................... 8

3. PROJECT MILESTONES ..................................................................................... 9

4. ASSUMPTIONS/DEPENDENCIES ......................................................................... 9
   4.1. ASSUMPTIONS ............................................................................................. 9
   4.2. DEPENDENCIES .......................................................................................... 10
       4.2.1. Dependent Projects ................................................................................. 10
       4.2.2. Dependent Products .............................................................................. 10
       4.2.3. Dependent Resources ............................................................................ 10

5. PROJECT CONSTRAINTS ................................................................................ 10
   5.1. PROJECT DIMENSION GRID ...................................................................... 11

6. RISKS ................................................................................................................. 11

7. PROJECT ORGANIZATION ............................................................................. 13
   7.1. PROJECT TEAM .......................................................................................... 13
   7.2. RULES AND RESPONSIBILITIES ................................................................. 13
   7.3. CHANGE CONTROL BOARD(S) ................................................................ 17

8. PROJECT APPROACH ...................................................................................... 17
   8.1. DEFINE ....................................................................................................... 17
   8.2. PLAN ........................................................................................................... 18
   8.3. IMPLEMENT ................................................................................................ 19
   8.4. CLOSE-OUT ................................................................................................ 20
   8.5. CHANGE MANAGEMENT .......................................................................... 20
   8.6. DOCUMENTATION ..................................................................................... 21
   8.7. COMMUNICATION ...................................................................................... 21
   8.8. MEASUREMENT .......................................................................................... 21
   8.9. ORGANIZATIONAL READINESS ................................................................. 21
   8.10. PROJECT ENVIRONMENT ........................................................................ 22
   8.11. QUALITY ASSURANCE ........................................................................... 22
8.12. TRACKING ........................................................................................................... 23
8.13. RISK MANAGEMENT ....................................................................................... 23

9. SYSTEM REQUIREMENTS ...................................................................................... 24
  9.1. SERVER REQUIREMENTS .............................................................................. 24
  9.2. PC CLIENT REQUIREMENTS .......................................................................... 24
  9.3. SCT AND 3RD PARTY, AND SHAREWARE/FREEWARE PRODUCT
       REQUIREMENTS .............................................................................................. 24
  9.4. DEVELOPER REQUIREMENTS ...................................................................... 24
  9.5. SOFTWARE COMPATIBILITY ....................................................................... 25
  9.6. OTHER HARDWARE/SOFTWARE REQUIREMENTS ........................................ 25

10. PROJECT DELIVERABLES .................................................................................. 25

11. PROJECT SUCCESS CRITERIA .......................................................................... 25

12. APPROVAL TO PROCEED .................................................................................. 27

13. ACRONYMS ......................................................................................................... 29

14. DEFINITIONS ...................................................................................................... 29
Executive Summary

The mission of this project is to deploy a new student information system to the university community consisting of a software implementation of SCT Banner Student software, additional supporting tools and business process improvements.

The Banner Student system will be implemented in two phases.
- **Phase A** will involve implementation of the Banner modules that are required to continue with the day-to-day functions of Student Records, Enrolment Services, and Institutional Analysis.
- **Phase B** will include implementation of new functionality not currently provided (e.g. Continuing Education Non-degree programs).

The Banner Student System will be rolled out modularly. As each module goes live, the corresponding legacy system will no longer be the system-of-record, and interfaces will be developed accordingly to ensure continuity of data and processes.

1. **Course Catalog and Scheduling**
   - a) 2006/2007 Course Catalog will be built in Banner starting in April 2005 after the 2005/2006 Catalog has been closed.
   - b) Faculty updates in Banner will commence in 2006 for the 2007/2008 Catalog.

2. **Admissions** – Go-live in Sept 2005 for students who will be registering for 2006 and 2007 sessions.

3. **CAPP** - Go-live planned for fall 2005. This date is based on reducing the number of modules being activated in spring 2006.

4. **Registration** – will be rolled out in two stages:
   - a) Summer Session 2006 (March 2006)
   - b) Regular Session 2006 (Sept 2006)

5. **Recruiting** – will be rolled out in two stages. As the Banner system does not provide the required functionality, options are being looked into and dates are yet to be determined.
   - a) Students/cohorts - date to be determined but likely in conjunction with Admissions Go-Live.
   - b) Communication Plan for High Schools.

To ensure a successful implementation, the project will be monitored with regular assessments of the project schedule, risks, and system requirements. As well, change management and issue tracking will be used to ensure the project keeps to the intended timeline.
1. **Introduction**

1.1. **Mission**

The mission of this project is to deploy a new student information system to the university community consisting of a software implementation of SCT Banner Student software, additional supporting tools and business process improvements.

1.2. **Objectives**

The primary objective of the SIS project is to deploy SCT Banner Student software package throughout The University of Manitoba user community.

This deployment is designed to meet the following goals:

- Implement an integrated, flexible and reliable data base system accessible through the Internet.
- Provide web-based services to students that are competitive with other Canadian universities.
- Provide a user-friendly, easy to use system with appropriate documentation.
- Provide efficient tools to staff to perform their administrative tasks, including recording transactions, making improvements to processes, and monitoring operations by being able to directly retrieve summary data and create ad hoc reports.
- Address the function gaps identified by as noted in the Report on the Student Information System Renewal Project dated June 27, 2001 (Case for Change section).
- Provide data to meet the decision support needs of the University and the regulatory requirements of outside agencies, in general, and specifically as identified by Institutional Analysis.

1.3. **Benefits**

The project improves University of Manitoba’s effectiveness by enabling improved institutional practices and data access, leading to improved decision-making and enhanced services to constituents. The project also helps the university become more progressive by allowing constituent access to information anytime and anywhere, through technologies such as the Internet.

**This project will benefit University of Manitoba by:**

- Redefining work practices associated with the student system. Changes to policies and procedures will be driven by improvement in services, operations or in economies of scale that are driven by the scope of the project.
- Adding functionality to the system. For example the recruitment module and ad hoc reporting.
- Reduced dependency on Administrative Systems for information.
- Student and Faculty Self-Service.
- More effective use of advisor time and resources through the advisor module.
- Accessibility (e.g. off-campus) provides an opportunity to improve the efficiency of processes and decrease the paper.
- Reduction of shadow systems.
- Provide the students a better chance of success by having access to the information needed.

1.4. **History and/or Background**

The University of Manitoba has five major enterprise administrative systems: the Human Resource Information System (HRIS), the Financial Management Information System (FMIS), the Student Information System (SIS), the Alumni and Development System and the Library System. All but the Library System run on a mainframe computer with the O/S390 operating system. These systems have been developed and evolved in-house over the past 25 years or more. Although they have served the University well over this time, the software and hardware platform these systems run on is becoming obsolete and is expensive to maintain.

Driven by the need for better information that could be integrated across functional areas, more user-friendly applications and a modern computing environment, the University initiated a Systems Renewal Project to acquire/modernize the Human Resource Information system (HRIS), the Financial Management Information system (FMIS) and the Student Information system (SIS) and to acquire an Academic Record system (ARS). The SIS project began in the spring of 1999 and, following an extensive review and vendor search, a contract has been signed with the successful proponent, SCT Software & Resource Management Corporation (SCT).

1.4.1. **Feasibility Recommendations**

The project’s feasibility is high, as a careful evaluation has taken place to ensure that there is commitment among the resources to complete the project as scoped, however there are constraints on timing of releases due to the nature of the school calendar.

2. **Project Scope**

As the SIS project encompasses more than just software implementation, the scope is described accordingly.

2.1. **Overall**

A new Student Information System will replace the existing mainframe application(s) that currently address these functions. The implementation includes but is not limited to:

- The purchase, configuration and installation of backend hardware;
- A pre-implementation study
- The installation and configuration of SCT software (Banner);
- The installation of workflow software that will assist in the development of improved work processes;
- The installation of imaging software for electronic document storage;
- The installation of reporting software that will enable the decentralization of decision support queries;
- The installation of software to enable e-printing and electronic data interchange;
• The installation of an operational data store (ODS) that will form the basis of the student data warehouse;
• Data conversion from the existing system to the Banner system; this will address any requirements for retention of data, legal or otherwise;
• Testing of systems installed and implemented;
• Building of interfaces to other applications;
• Training of technology staff in the use of the database tools and the application software
• Training of system administrators for the use of the Banner product;
• Initial training of the University user community;
• Development of any new policies and/or procedures that are required for full utilization of the system; and
• Development of the plan for ongoing operations and maintenance of the system.

2.2. **SCT Banner**

The new SCT Banner systems will replace and enhance specific University of Manitoba administrative systems and will include the following software components:

- SCT Banner Student
- SCT Banner Web for Students
- SCT Banner Web for Faculty & Advisors
- SCT Banner Workflow
- EDI Smart
- SCT Banner Connection for WebCT
- SCT Mercury Messaging System
- SCT Operational Data Store

In connection with the above, SCT will deliver training and implementation support services, additional miscellaneous consulting services, and project management.

Specifically these services include:

- Project Management Level 2
- Data Migration Toolkit (Student)
- SCT Banner Connection for WebCT and Administrator training
- Xtender Solutions – 1 additional business area
- SCT Banner Student product and technical training & consulting including Business Process Analysis Fit/Gap review services.
- SCT Banner Student Self-Service & Faculty & Advisors Self-Service training & consulting.
- SCT ODS Installation and Training services
- Technical and Cross Product Services

2.3. **Related Scope**

- The University of Manitoba will write the interfaces for other 3rd party applications not specifically mentioned in the SCT contract.
While SCT will provide consulting on data migration planning, it is University of Manitoba’s responsibility to clean, convert and maintain the integrity of the data. University of Manitoba will create and conduct end user training for those end users not directly trained by SCT.

2.4. Out of Scope

The following applications or systems, while they may be impacted or have information flows related to the SIS project, will not be managed under the direction of the SIS project:

- Library system
- Parking (ticketing)
- Residence (housing)
- Food services
- Bookstore
- Facility Use (Phys Ed)
- Building security
- Location Management (Space Inventory)

The Luminis Enterprise Portal and Workflow products were also purchased from SCT. These products include Student Information System (SIS) functionality but also include additional functions beyond the scope of this project. The implementation of the Luminis Portal therefore will not be considered part of the Student Information System implementation project, but coordination will be required to ensure portal functions are available as needed.

Workflow will be implemented in a post-SIS implementation phase. However, a portion of Workflow may need to be implemented in phase A if it is required to resolve a functionality gap.

2.5. Planned Process Improvements

University of Manitoba will modify business processes as reasonably required to conform to best practices of SCT Banner usage.

As part of the implementation the Student functional areas will participate in Business Process Analysis and Fit/Gap Analysis.

The initial analysis will be completed on processes submitted to SCT where a Business Process Analyst and Function Consultant will create a report of Gaps between existing processes and the Banner software. Should additional analysis be needed they will scheduled at that time.

Conduct joint scheduling sessions for the training and implementation to ensure that all needs are considered before committing resources.
3. **Project Milestones**

These dates are supplemental to the project schedule and may be subject to change.

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Started</td>
<td>08/01/03</td>
</tr>
<tr>
<td>Project Definition Approved</td>
<td>03/19/04</td>
</tr>
<tr>
<td>Initial Project Schedule Completed</td>
<td>04/15/04</td>
</tr>
<tr>
<td>Student Training Started</td>
<td>01/20/04</td>
</tr>
<tr>
<td>Recruitment Go-Live</td>
<td>September 2004</td>
</tr>
<tr>
<td>Calendar Go-Live</td>
<td>April 2005</td>
</tr>
<tr>
<td>Admissions Go-Live</td>
<td>September 2005</td>
</tr>
<tr>
<td>CAPP Go-Live</td>
<td>October 2005</td>
</tr>
<tr>
<td>Mock Registration</td>
<td>February 2006</td>
</tr>
<tr>
<td>Summer Registration Go-Live</td>
<td>April 2006</td>
</tr>
<tr>
<td>Summer Grading Go-Live</td>
<td>May 2006</td>
</tr>
<tr>
<td>Regular Registration Go-Live</td>
<td>July 2006</td>
</tr>
<tr>
<td>Begin Planning for Process Improvement/Change Management</td>
<td>September 2006</td>
</tr>
</tbody>
</table>

4. **Assumptions/Dependencies**

Assumptions and Dependencies are items that are being presumed and are potentially out of our control.

4.1. **Assumptions**

- The training will be effective and just in time to implement the system on time and on budget.
- The implementation team will be available for all training as required and will complete the assigned work.
- The data in the Banner database will be accessible.
- The Banner product will satisfy the project requirements better than the current system(s).
- The project teams will be staffed sufficiently to complete the implementation.
- The Banner Student system will meet the expectations of the team.
- The University community will make the necessary changes to use Banner effectively.
- Rules and policies will be modified to allow Banner to be used as planned.
- Resources will be available to use Banner (e.g. everyone have access to a linked computer)
- Conversion will be manageable in the timeframe specified.
- Non-Banner related gap solutions can be resolved during the project.
4.2. **Dependencies**

4.2.1. **Dependent Projects**

The table below identifies the ongoing projects whose deliverables will be required to enable this project to meet its objectives.

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Expected Completion Date</th>
<th>Reason for Dependency</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMIS</td>
<td>April 1/05</td>
<td>Chart of accounts and A/R postings</td>
</tr>
<tr>
<td>HRIS</td>
<td>July 1/05</td>
<td>Employee info for general person, HR conversion resources will be used on SIS conversion team</td>
</tr>
</tbody>
</table>

4.2.2. **Dependent Products**

The table below identifies the products (whether produced by SCT or a third party) that will provide the deliverables that are required to enable this project to meet its objectives.

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Release Number</th>
<th>Release Dependency is Higher</th>
<th>Reason for Dependency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banner Student</td>
<td>6.x</td>
<td></td>
<td>Critical product functions</td>
</tr>
<tr>
<td>Banner General</td>
<td>6.x</td>
<td></td>
<td>Critical product functions</td>
</tr>
<tr>
<td>Banner Web for Student</td>
<td>6.x</td>
<td></td>
<td>Critical product functions</td>
</tr>
<tr>
<td>Banner Web for Faculty</td>
<td>6.x</td>
<td></td>
<td>Critical product functions</td>
</tr>
<tr>
<td>Xtender Solutions</td>
<td></td>
<td></td>
<td>Document management</td>
</tr>
<tr>
<td>Workfow</td>
<td></td>
<td></td>
<td>Business Process facilitation</td>
</tr>
<tr>
<td>WebCT</td>
<td></td>
<td></td>
<td>Communication</td>
</tr>
<tr>
<td>ODS</td>
<td>Release 1</td>
<td></td>
<td>Data Access &amp; Reporting</td>
</tr>
</tbody>
</table>

4.2.3. **Dependent Resources**

Identify the people and material resources required on which the project is dependent.

- Students for mock registration
- Staff backfill
- Module team members including technical resources
- Project room availability
- Third party testing for interfaces on systems not part of Banner

5. **Project Constraints**

Project Constraints are aspects about the project that cannot be changed and are limiting in nature. Constraints generally surround four major areas: Scope, Cost, Schedule (Time), and Quality. Either through direction given by the Project Sponsor(s) of the project, or by working through the issues, the constraining factors of the project must be identified.
5.1. **Project Dimension Grid**

The grid below prioritizes the critical project dimensions and is used to negotiate changes during the course of the project. First step is to specify the constraining dimension. Is the critical project driver scope, cost, quality, or time? The second step is to specify the accept dimension. If change is required, in which area are the key stakeholders most willing to accept change–scope, cost, schedule, or quality? Change must be accepted in at least one dimension. This is specified in the Vary column below. Remaining dimensions are then minimized or maximized. These dimensions will be utilized for all aspects of the project, unless explicitly stated in a sub-project definition.

Specify the project dimensions below. Constrain at least one dimension and vary at least one dimension.

<table>
<thead>
<tr>
<th>Project Dimension</th>
<th>Minimize/Maximize</th>
<th>Constrain</th>
<th>Vary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope</td>
<td>Maximize</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Cost</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schedule</td>
<td>Maximize</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Quality</td>
<td>Maximize</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. **Risks**

Identify the risks (or use the Risk Report) to the project with respect to the environment, user expectations, competing projects, project assumptions, resources or any other relevant matter or refer to the work products database. Examples of risk include potential loss of a critical resource, technology changes, regulatory changes, dependence on a third party, scope changes, project sponsorship or management changes legal issues. For high-probability and high-impact risks, specify a plan for reducing the likelihood/impact of the risk (mitigation). Approaches to responding to risks include Deflection (transferring the risk to another party), Control (minimize the effect), Retention (accept the consequences), and Avoidance (reject the risk; do nothing).

Risks identified during the project should be added to this section as well as the work products database. Anticipated project issues at the beginning of the project should be logged as risks. Risks can be escalated to Project Issues or Jeopardies after the project is initiated (See Identify and Resolve Issues and Identify and Resolve Jeopardies activities). If a risk becomes an issue or jeopardy, it must be designated as such below.

Probability of Occurrence, Estimated Project Impact, and Weight (described below) are one method of classifying risks. Other methods can be used. Probability guidelines:

- **Very Likely**: 70-100%  A = 3
- **Probable**: 40-70% A = 2
- **Unlikely**: 0-40% A = 1

Impact guidelines for scope, cost, schedule, or quality

- **Catastrophic**: B = 3
- **Critical**: B = 2
- **Marginal**: B = 1
<table>
<thead>
<tr>
<th>Risk</th>
<th>Probability of Occurrence (A)</th>
<th>Estimated Project Impact (B)</th>
<th>Weight B+(A-1)</th>
<th>Issue or Jeopardy Control No.</th>
<th>Mitigation Strategy</th>
<th>Contingency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy gaps not resolved in time to meet delivery dates</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>Document gaps and provide to Core Team to address</td>
<td>Move gaps to phase B where possible</td>
</tr>
<tr>
<td>Technology solutions gaps not in place in time to meet delivery dates</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>Identify gaps and provide software solutions</td>
<td>Re-assign tech staff where possible to meet deadlines</td>
</tr>
<tr>
<td>Insufficient resources/planning to handle data volume for conversion</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>Build data conversion plan to determine magnitude</td>
<td>Reduce scope of data conversion. Archive data for future solution.</td>
</tr>
<tr>
<td>FMIS not implemented by April 01/05</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>Align project schedules and give priority to FMIS</td>
<td>Reschedule SIS Go-live dates</td>
</tr>
<tr>
<td>Insufficient resources to handle FMIS and SIS at once</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Align project schedules and give priority to FMIS</td>
<td>Reschedule SIS Go-live dates</td>
</tr>
<tr>
<td>Financial Aid solution not developed in time to meet our needs</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>6</td>
<td>Dedicate resources to work with Can. Solution Centre.</td>
<td>3rd party solution or continue to use current IMS-based systems</td>
</tr>
<tr>
<td>Volume of articulation material/data/evaluation exceeds the time line</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>7</td>
<td>Develop implementation plans within project timeline and scope</td>
<td>Reduce scope or reschedule SIS Go-live dates</td>
</tr>
<tr>
<td>Course numbering decision needed by November 2004</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>8</td>
<td>Reschedule Course Catalog Go-Live</td>
<td>Revert back to current course numbering system</td>
</tr>
<tr>
<td>Decision on reporting tool for OIA not completed by registration go live</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>9</td>
<td>Obtain and review ODS requirements &amp; set-up</td>
<td>Go with existing tool set (Cognos or Crystal)</td>
</tr>
<tr>
<td>Awards for entrance scholarships not in place prior to Admissions Go-Live</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>10</td>
<td>Dedicate resources to work with Can. Solution Centre.</td>
<td>3rd party solution or continue to use current IMS-based systems</td>
</tr>
<tr>
<td>Current recruitment data not in Banner by September 2004</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>11</td>
<td>Review requirements</td>
<td>Manual data entry</td>
</tr>
<tr>
<td>Resistance to Change</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>12</td>
<td>Challenge solutions &amp; adhere to the communication plan</td>
<td>N/A</td>
</tr>
<tr>
<td>Insufficient Planning</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>13</td>
<td>Provide project plan details to implementation teams</td>
<td>N/A</td>
</tr>
</tbody>
</table>
7. Project Organization

This section deals with all people and/or departments that will participate in this project. See Project Charter for the project organization chart.

7.1. Project Team

This is a high-level listing of the personnel involved that will be assigned to this project. Each resource on the project should be listed here or in the Project Schedule. The Resource type should describe the responsibilities - project manager, etc. There should be a resource type for every role defined in the Roles and Responsibilities section below.

The key roles are listed below and based on the Work Breakdown Structure (WBS) conducted for this project.

<table>
<thead>
<tr>
<th>Resource Type</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Management Committee Chair</td>
<td>Neil Marnoch</td>
</tr>
<tr>
<td>Project Business Analyst</td>
<td>Sherman Greenberg</td>
</tr>
<tr>
<td>Institutional Reporting Head</td>
<td>Thelma Lussier</td>
</tr>
<tr>
<td>Institutional Reporting Team Leader</td>
<td>Bev Doern</td>
</tr>
<tr>
<td>Enrolment Head</td>
<td>Peter Dueck</td>
</tr>
<tr>
<td>Financial Aid Team Leader</td>
<td>Cheryl Richardson</td>
</tr>
<tr>
<td>Recruitment Team Leader</td>
<td>Iris Reece</td>
</tr>
<tr>
<td>Admissions Team Leader</td>
<td>Iris Reece/Jeff Huston</td>
</tr>
<tr>
<td>General Person Leader</td>
<td>Heather Aldwyn</td>
</tr>
<tr>
<td>Academic Evaluations Head</td>
<td>Neil Marnoch</td>
</tr>
<tr>
<td>Grading Team Leader</td>
<td>Lynn Romuld</td>
</tr>
<tr>
<td>Academic Assessment Team Leader</td>
<td>Gayle Gordon</td>
</tr>
<tr>
<td>Program Management &amp; Definition Team Leader</td>
<td>Lynn Hamilton</td>
</tr>
<tr>
<td>Advanced Standing Team Leader</td>
<td>Jeff Huston</td>
</tr>
<tr>
<td>Records Management Head</td>
<td>Sherman Greenberg</td>
</tr>
<tr>
<td>Registration Team Leader</td>
<td>Laura Bean</td>
</tr>
<tr>
<td>Academic Fees Team Leader</td>
<td>Maureen McCarthy</td>
</tr>
<tr>
<td>Course Scheduling Team Leader</td>
<td>Irene Mikawoz</td>
</tr>
<tr>
<td>Technical Team Leader</td>
<td>Brenda Treleaven</td>
</tr>
<tr>
<td>Collections Management</td>
<td>Marcia Bryson</td>
</tr>
<tr>
<td>Collection Team Leader</td>
<td>Bev Witt</td>
</tr>
</tbody>
</table>

7.2. Roles and Responsibilities

Project Management Committee Chair – the PMC Chair will:

1. In consultation with the project manager, prepares a project plan including milestones and benchmarks and submits to the Executive Committee for approval.
2. Reviews regularly reports from the Project Manager on the status of the project
   i. Monitors system implementation for significant variances.
   ii. Recommend, for approval by the VP Administration/Academic, any significant adjustments to budget, scope and/or timelines.
3. Act as an escalation point for the project manager if difficulties arise in meeting project goals and timelines. Individual members are expected to manage their own staff involved in the project to ensure project timelines and goals are achieved.

4. Advise Project Manager
   i. Receive information and respond as appropriate with support, advice and guidance.
   ii. Receive recommendations and respond as appropriate with approval, advice and guidance.

5. Advise Executive Committee of any significant issue noted in the course of its review and monitoring that would indicate that project success is at risk.

6. Helps the Project Manager and the implementation team obtain timely information and help from users.

7. Responds to any identified needs for additional software/hardware resources, outside consultants, and additional temporary staff and makes recommendations to the Project Manager.

8. Acts as a central resource for coordination with other System Renewal projects.

9. Consults with the Project Manager in making timely and binding policy decisions about operational problems that cannot be resolved by the Implementation Team.

10. Serves as institutional champions of the project.

11. Ensures there is communication on the project, with campus, in a timely, continuous manner through multiple media.

12. For all aspects of the project, monitor to ensure that stakeholders are appropriately informed and involved.

13. Has special responsibility, along with the Functional Project Teams, for change management.

**Project Manager** - the Project Managers will:

1. Serve as Project Manager to support project success in coordination with Application Owner (Director of Student Records and Director of Enrolment Services), and Project Director.

2. Maintain the project budget.

3. In conjunction with the Vendor, develop and maintain the Project Plan, including the change management component.

4. Manage the project plan to support achievement within project scope and objectives
   i. Identify and monitor project critical path.
   ii. Monitor staffing and allocation/consumption of all project resources.
   iii. Co-ordinate project plan and tasks with vendor.

5. Oversee system implementation.

6. Provide information to implementation related committees.

7. Facilitate Project Team meetings and provide Leadership.
8. Ensure that issues not resolved by the Functional Project Teams are documented, with recommended solutions, and forwarded to the Project Management Committee for resolution.

9. Ensure adherence to the implementation methodology.

10. Recommend Public Communication Plan and monitor its implementation.

11. Review the Project Plan.

12. Provide reports on a bi-weekly basis to the Executive Team as well as create the agenda for those meetings in conjunction with the Project Sponsor.

13. Review/maintain project work documents.

14. Track lessons learned.

The Project Manager is accountable to the Project Management Committee and the Project Sponsor and is responsible for coordinating the activities of the IT Project Leader and the Functional Project Leader. The Project Manager is responsible for managing the vendors as well as the budgets and timeline.

**Business Analyst**

1. Document and analyze current procedures through discussions with University staff and faculty. Work with the vendor to ensure they understand our procedures, workflows and policies.

2. Receive training on the system being implemented to understand how it functions. Work with the vendor to develop recommendations on how the system will be implemented at the University.

3. Work with implementation teams to identify procedures, workflows and policies to be established in conjunction with the Banner Student System. Determine where these are different from existing ones and develop plans for how changes will be implemented.

4. Evaluate identified gaps and determine if the solution is a change in procedure/policy, a bolt on, a work around or a customization. Prepare a decision support document including a cost/benefit analysis for any proposed customizations.

5. Manage the change process, ensuring to include faculty and staff as appropriate who are impacted by the change. This inclusion can be in the form of active participation on the related implementation team, consultation and feedback mechanisms or communication on status and directions.

6. Ensure appropriate people are consulted for decisions on policies and procedures.

7. Ensure decisions on policies and procedures are made in an appropriate timeframe.

8. Ensure work is integrated into the Student System implementation project plan by working closely with the project manager.

9. Be an active participant in and contributor to the project communication plan.

**Project Leaders (Leaders of Functional and Technical Teams)**
1. Meet on a regular weekly schedule to resolve issues within their jurisdiction and make recommendations to the Project Manager.
2. Evaluates progress of project and makes necessary adjustments to resources, timeline and schedule within their realm of responsibility.
3. Assigns tasks to team members as necessary.
4. Ensures integration of policies and adherence to standards.
5. Attend all project related training

As a group the Project Leaders and the Project Manager will oversee and expedite the implementation of all systems, including the change management component. The Project Leaders will meet with the Project Manager on a weekly basis. Additionally the Project Leaders will:

The IT Project Leader is accountable to the Project Manager for all areas of the project that relate to hardware, software, and infrastructure. The IT Project Leader's responsibilities involve coordinating the resources of the Information Services and Technology unit to meet the project's delivery objectives and time schedules. The IT Project Leader will liaison with the vendor's technical staff to address any issues that arise during the installation of hardware, databases and software and is the main point person for any issues about configuration or authorized customization. The IT Project Leader will be expected to monitor the technical interdependencies between systems (i.e. the HRIS, SIS and the ARS with the FMIS) and ensure through consultation with the Project Director and/or the Executive Committee that any issues are resolved.

The Functional Project Leaders are accountable to the Project Manager to provide expertise and knowledge of the student environment within The University of Manitoba. The Functional Project Leader is responsible to provide staff resources as required and to provide needed business information in a timely manner. Should any work processes need to be modified during the implementation of the project; the Functional Project Leader will provide assistance with the design of the process, the development of any necessary policy changes and the communication of the changes to the relevant stakeholder groups and users. The Functional Project Leader will be expected to monitor the functional interdependencies between systems (i.e. the HRIS, SIS and the ARS with the FMIS) and ensure through consultation with the Team Leaders and/or the Executive Committee that any issues are resolved. Finally, functional project leaders are expected to understand processes and procedures, understand how the system functions in support of these and ensure decisions are made in the appropriate time frame by the appropriate staff.

**Team Members**

Each team member is responsible and accountable for assigned tasks as directed by the Team Leader. They routinely inform the Team Leader and/or other team members of the progress to date or any problems that are encountered.
1. Receive SCT training.
2. Responsible for configuring Banner with U of M’s data and business rules.
3. Attend Team Meetings.
4. Provide substantiated recommendations to Project Leaders and Project Manager.
5. Act as the subject matter expert in their respective area of expertise.
6. Define and test user procedures for their area.
7. Develop Policy and Procedures Manuals and end-user training documents.
8. Validate converted data in their area.

Implementation Process Teams will be organized to correspond to SCT Banner functional systems.

Each Team is the primary liaison between all groups involved in the particular area and will ensure representation of non-implementation personnel where appropriate. The Teams will make process and procedural decisions related to the implementation in their functional areas. During its implementation cycle, each Team will meet on a weekly basis and will submit a status report in writing on a weekly basis to the Team Leaders. The Team members will attend the system education training sessions provided by SCT.

It should be noted that the duties and responsibilities of Team Members apply to all members of the Project Team including the Project Manager, Project Leaders and Team Leaders.

7.3. Change Control Board(s)

Identify the members of the Change Control Board(s) or refer to CM Plan. Include their role or the area of the project each person is representing on the CCB.

<table>
<thead>
<tr>
<th>Member Name</th>
<th>Role or Area of Representation</th>
</tr>
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<tbody>
<tr>
<td>Project Executive Committee</td>
<td>SEE PROJECT CHARTER</td>
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<tr>
<td>Project Mgmt Committee</td>
<td>SEE PROJECT CHARTER</td>
</tr>
<tr>
<td>SCT Project Manager</td>
<td>SEE PROJECT CHARTER</td>
</tr>
</tbody>
</table>

8. Project Approach

The project approach section defines the overall method by which the project’s objectives will be realized, including methodologies, life cycles, responsibilities, and other associated strategies, tactics, practices and procedures.

8.1. Define

This definition establishes overall strategies and direction to be used in the definition, scope, planning and scheduling of the project.

See Project Charter for overall strategy.
Some strategies not covered by the Project Charter:

- Business Processing Re-engineering (BPR) will be done in parallel to the implementation. However, no new processes will be implemented until post-implementation other than those required to continue with current policies or to overcome required functional gaps.
- Banner Student will be set-up and configured to meet current practices and policies, as much as possible.
  - As well, steps will be taken to ensure that this configuration allows Continuing Education to use the system for non-degree programs.
  - Banner will also be configured to include St. Boniface degree students and courses. In later phases, St. Boniface non-degree courses and students will be addressed.
- A Canadian version of Financial Aid is being investigated by SCT in conjunction with the Canadian Solutions Centre. The University of Manitoba will have representation on the design team.

8.2. Plan

Typically this will include clarification on implementation strategies such as Phases definition, prioritization, relationships with legacy systems, positions on modification to baseline products, roll out strategies etc.

The Banner Student system will be implemented in two phases.

- Phase A will include implementation of the Banner modules that are required to continue with the day-to-day functions of Student Records, Enrolment Services, and Institutional Analysis.
- Phase B will be used to implement new functionality (e.g. Workflow, Continuing Education Non-degree programs).

The Banner Student System will be rolled out modularly as specified by the Project Milestones (See Section 3). As each module goes live, the corresponding legacy system will no longer be the system-of-record, and interfaces will be developed accordingly to ensure continuity of data and processes.

1. Course Catalog and Scheduling
   a) 2006/2007 Course Catalog will be built in Banner starting in April 2005 after the 2005/2006 Catalog has been closed.
   b) Faculty updates in Banner will commence in 2006 for the 2007/2008 Catalog.


3. CAPP - Go-live planned for fall 2005. This date is based on reducing the number of modules being activated in spring 2006.

4. Registration – will be rolled out in two stages:
   a) Summer Session 2006 (March 2006)
   b) Regular Session 2006 (Sept 2006)

5. Recruiting – to be determined. At this time, there are two stages identified:
   a) Students/cohorts - date to be determined but likely in conjunction with Admission Go-Live.
   b) Communication Plan for High Schools.
The Banner Student System will also be distributed campus-wide:

- To allow faculties and academic departments continued access to student data.
- With web self-services for continued student access

### 8.3. Implement

This is where the project life cycle would be interjected into the approach. Sub-sections should be included for every project phase in your project life cycle. For example, a project for software implementation may include phases for Requirements Definition, Software Selection, Gap Analysis, Software Installation, Modifications, Conversions, Training, User Acceptance Testing, Pre-Production, Production Cut-Over and Software Maintenance. Provide details regarding how the project is going to be completed for every phase. For software modification projects, identify the software development life cycle that will be used.

The following is a list of the plans and strategies that will be developed for this project:

1. Implementation Plans for each functional area
2. Overall data conversion plan
   - All Student Record data will be converted
   - Correction of historical data will be completed in Phase B
3. Interface plan for data transfers to other administrative systems, including
   - which interfaces are to new systems (e.g. VIP) and which one still need to link to legacy systems that have not been migrated at the time the Banner Student module goes live.
4. Reporting strategy, including
   - how report development will be accomplished
   - what and where technical support will be available
5. Functional and Technical Documentation plans
6. Overall Communication plan
7. Security Plan, including
   - how security will be set-up/configuration
   - Client office and IST responsibilities
8. Web set-up plan on
   - Client office web pages
   - Banner web pages
9. BPR plans for procedure/policy/process changes
10. In-house Development plans for any required processes, outside of the Banner System (i.e. bolt-ons)
11. Test plan for each module, including
    - unit testing
    - end-to-end testing
12. Go-live plan for each module

Stages for each module will include:

1. Functional Training, Developing and Testing the Prototype. During this stage each team will be expected to
- Attend Banner training and consulting sessions, and familiarize themselves with how Banner works
- Obtain current University practices and procedures that pertain to their functional area

2. System build of
   - Banner validation tables and process rules
   - procedures, processes, forms, etc using Banner

3. Data Conversion based on
   - requirements for each module
   - where manual data entry will be required

4. Development of bolt-ons and inter-system interfaces

5. Development of reports

6. Unit and End-to-end tests

7. End-user training

8.4. **Close-Out**

Closing out a project involves both product verification (was all work completed correctly and satisfactorily?) and administrative closure (verifying and documenting project results to formalize acceptance of the product of the project by the sponsor, client, or customer, plus collection of project records, ensuring that they reflect final specifications, analysis of project success and effectiveness, and archiving such information for future use). Describe the approach for how this will be done.

- Data conversion
  - Verification of conversion results
  - Audited
- System Requirements
  - Each requirement will be noted as to how it was achieved: customization, workaround/manual, in-house development, or provided in the Banner base product
- Fit Gap Analysis
  - How was each gap addressed
- Sign-off on end-to-end tests
  - scenarios representing required functionality
  - functionality combined with procedures
  - data transfer tests (i.e. interfaces)
  - reports
- System performance tests
  - Day-to-day client office activities
  - Web Self-service processes

8.5. **Change Management**

Describe approach for Change Management or refer to the CM Plan.

- All requests for changes to system, procedures, and processes as defined in implementation plans must be made in writing to project management team, noting reason for the change and the proposed course of action.
- Evaluate change requests against project scope, budget, resources, and timeline.
8.6. **Documentation**

Describe approach for Documentation or refer to the Documentation Plan.

- Project documentation. All documentation on project plans, status reports, meeting minutes, and project decisions will be maintained on a centralized file directory and accessible via Novell or the web.

- Functional documentation. To be determined once better understanding of Banner is obtained. Options include:
  - procedure manuals
  - reference manual for rules and policies
  - function/process manuals

- Technical documentation
  - system configurations
  - In-house developed reports
  - in-house developed processes
  - backup and recovery procedures

8.7. **Communication**

Describe the communications approach for the project or refer to the Communication Plan.

An overall project communication plan will be develop based on topic, audience, format, and date. Basic topics will cover:

- project status and milestones
- Proposed/new changes & implementation specific to each module

8.8. **Measurement**

Describe the metrics that will be captured for the project or refer to the Defined Metrics report. Describe approach for collecting and analyzing each metric, or refer to the Collection and Analysis Methods and/or QA Plan. An example measurement is actual effort. An example collection approach is time sheets with specific project and task codes.

Project monitoring will be task based; meaning the amount of work to be done within the prescribed time period will be measured and reported on. Tasks per module/functional area will be detailed on the project schedule (e.g. setting up required validation tables).

8.9. **Organizational Readiness**

Describe approach for Organizational Readiness or refer to the OR Plan.
An OR or Go-live plan will be developed for each module. The plan will consist of but not limited to:

- Check of all required tasks and steps (see QA plan)
  - Signed off
  - Audited
- cutover of new processes and new forms
- production data conversion and timing
- interface cutovers
- setting up background processes
- ensuring all hardware/software requirements are in place
- web pages setup
- end-user training completed
- production controls are in place
  - system administration
  - change management
  - help desk

8.10. **Project Environment**

Describe the Project Environment including the estimated use of critical computer resources, and use of shareware/freeware components.

The implementation teams will have access to a project room which will have a minimum of six workstations for testing. The project room will also be used for small team meetings. There will also be a System Renewal training room for Banner training sessions, end-user training, and large group testing.

The database environment is comprised of four database instances that will be used through the project:

1. **Training** - used for module training and prototyping: During implementation, there will be two training instances:
   a) BANTRNG – production-related training to be used by FMIS
   b) BANVTRN – temporary instance for vendor training on SIS
2. **Testing** - used setting up module tests, and data conversion and interface testing.
3. **NEXT** - used to prepare for production.
4. **Production** - the system-of-record.

8.11. **Quality Assurance**

Describe approach for Quality Assurance or refer to the QA Plan. The term Quality Assurance in this instance refers to “auditing of the process.” Did we do what we said we were going to do?

- Conduct a module-by-module review of the System Requirements to ensure project scope is being upheld and that the system is being properly defined. A final review will be done as part of go-live preparedness.
8.12. **Tracking**

Describe the timing of periodic review meetings and scope reassessment events that will trigger review meetings.

The meeting schedule for the project will be as follows:

- The Core Implementation Team will meet weekly, except during weeks with Banner training.
- The Banner SIS Technical Team will meet twice per month, or more often if needed.
- The Project Management Committee (PMC) meets bi-weekly.
- The Project Executive Committee will meet quarterly.

Project tracking will consist of but not limited to:

- Weekly status reports from project teams.
- Project schedule updates as per status reports and change requests.
  - Three schedule review dates have been set to ensure project dates as defined are still attainable: April 2004, August 2004, and December 2004. These dates are based on the training schedule as the training sessions will be used to determine the workload.
- Project Manager’s reports on progress or lack thereof to PMC. Any changes to project timeline require project management approval and must be reported to project sponsor(s).
- All issues will be logged that impact project scope, budget, or resources, noting the severity of the issue and the planned course of action to resolve the issue.
- All course of actions must be signed off by affected party and approved by project management team.
- Monitoring the issue log to ensure issues are being resolved.

8.13. **Risk Management**

Risks are identified at the beginning of the project and throughout the project. When a Risk is identified, Mitigation Actions and Contingency Plans are developed and recorded in the Work Product’s database. The Project Manager manages the Risks by executing Mitigation Actions, which may include how the contingency plans will be implemented and how the reserves will be allocated. If a Risk materializes, it is escalated to a Project Issue or Jeopardy by executing the Identify and Resolve Issues or Identify and Resolve Jeopardies activities. Risk Contingency Plans may become the Project Issue or Jeopardy Action Plan.

- Document all risks that could cause project to deviate from project plan(s), noting severity and planned course of action to mitigate risk
  - Conducted at Project Kick-off
- Regularly review the risk log with the project management team to ensure the risks are not escalating.
- Project Risk Assessment to be conducted by Audit Services.
9. System Requirements

System Requirements are items that are necessary in order to run any related software required for the practices/methodologies at a client site. This includes hardware and software needs. The following are suggested sections and examples.

9.1. Server Requirements

Indicate Server Requirements or refer to a separate document.

The Oracle database and application servers are already in place, as per the System Renewal requirements. The web server is also installed.

The ODS/reporting server will be addressed once the requirements are known.

Any hardware upgrades will be identified and implemented following the system performance tests.

9.2. PC Client Requirements

Indicate PC Client Requirements or refer to a separate document

All workstations must be Pentium IIs or higher, and need to be capable of running current versions of internet browsers:
- Netscape 6.2 -> 7.1
- Internet Explorer 6.0

Macintoshes should be running System 10 for the operating system and Internet Explorer 5.5.

9.3. SCT and 3rd Party, and Shareware/Freeware Product Requirements

Indicate PC Client Requirements or refer to the Integration Plan:

<table>
<thead>
<tr>
<th>Product</th>
<th>Implementation Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adobe Acrobat Reader</td>
<td></td>
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<tr>
<td>Oracle JINIT</td>
<td>Cognos or Crystal Reports</td>
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<tr>
<td>Oracle ODBC</td>
<td></td>
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<tr>
<td>Other system software:</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Product</th>
<th>Implementation Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infosilem’s Exam Scheduling</td>
<td>Phase A Interface/Integration</td>
</tr>
<tr>
<td>Course Scheduling</td>
<td>Phase B Decision</td>
</tr>
</tbody>
</table>

9.4. Developer Requirements

Indicate Developer Requirements or refer to a separate document. A “developer” is defined as the person who is going to create the project’s product. The “developer requirements” are defined to be those requirements of the developer’s desktop PC in order to complete the work.

<table>
<thead>
<tr>
<th>Product</th>
<th>Implementation Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERL</td>
<td>SQL Plus and/or PL/SQL Developer</td>
</tr>
<tr>
<td>Enlighten (Cast)</td>
<td>Luminis IDS</td>
</tr>
</tbody>
</table>
9.5. **Software Compatibility**

Indicate PC Client Requirements or refer to System Transition Plan

N/A

9.6. **Other Hardware/Software Requirements**

Identify hardware which may be a possible requirement but not critical to the Phase A implementation.

<table>
<thead>
<tr>
<th>Hardware Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand-held Recruiters - Palm Pilots &amp; SCT Software</td>
</tr>
<tr>
<td>Document Scanners</td>
</tr>
</tbody>
</table>

Printing environment: Banner Student will be configured to use local printers within the client offices. These printers will be used for daily and low-output reports. The central printing services will be used for large-print jobs (e.g. parchments).

10. **Project Deliverables**

List the deliverables for the project that include the materials contractually required to be delivered to the client as well as the internal materials created by the project that are not contractually required by the client but which will be turned over to the client.

FROM CONTRACT

11. **Project Success Criteria**

Typically these have been identified as part of the scope, schedule and deliverables definitions. Project success criteria provide specific measurement for determining that the objectives and deliverables defined for the project have been met. This definition would include criteria such as:

- All issues and action items have been completed and signed off
- All required work products have been produced
- All deficiencies have been logged and signed off
- Verification that the project has met project and Organizational Entity standards
- Validation that the product meets the requirements
- A project termination statement exists, if applicable
- A project cancellation statement exists, if applicable
The project success criteria have been met when the project has validated that all major commitments and deliverables have been closed.
12. Approval to Proceed

Specify the approvers in the work products database or list them here.

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marcia Bryson</td>
<td>Manager Revenue Capital &amp; General Accounting</td>
<td>Peter Dueck</td>
<td>Director, Enrolment Services and Functional Leader, Enrolment</td>
</tr>
<tr>
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</tr>
<tr>
<td>Sherman Greenberg</td>
<td>Sr. Asst. Director, Student Records and Functional Leader, Records Management</td>
<td>Marvin Kocay</td>
<td>Director, Administrative Systems and Project Director, Systems Renewal</td>
</tr>
<tr>
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<tr>
<td>Thelma Lussier</td>
<td>Director, Institutional Analysis and Functional Leader, Institutional Reporting</td>
<td>Neil Marnoch</td>
<td>Director, Student Records and Functional Leader, Academic Evaluation</td>
</tr>
<tr>
<td>Tba</td>
<td>Faculty Representative</td>
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</tbody>
</table>

Date

Name
Title
Date
## Revision Record

<table>
<thead>
<tr>
<th>Number</th>
<th>Date and Sections</th>
<th>Author</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>.02</td>
<td>3/10/04</td>
<td>Mike Reilly</td>
<td>All Sections</td>
</tr>
<tr>
<td>.03</td>
<td>4/16/04</td>
<td>Brian Lewis</td>
<td>All Section Review</td>
</tr>
<tr>
<td>04</td>
<td>7/9/04</td>
<td>Dan Hiebert</td>
<td>Risks, Project Approach, Systems Requirements - All section review</td>
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</tbody>
</table>
### 13. Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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### 14. Definitions

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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