## APPENDIX B GLOSSARY

The following definitions represent a variety of terms related to the APD process. However, because the Handbook represents different FNS programs, all definitions do not apply in all cases.

<u>Acceptance Documents</u>—Documents signed by the State agency to indicate the State's satisfaction that a contractor has completed a phase of work in accordance with contract requirements. The information upon which, and the methods by which, a State agency is to base its decision, including documentation of the work product that the contractor is to furnish, should be agreed upon in advance.

**Acceptance Testing**—The phase of the SDLC in which an application is tested, usually by or in conjunction with users, to ensure that the application is functioning according to specifications and defined requirements and is acceptable to users.

Acceptance testing usually involves testing each logic path to validate that each condition in a system is functioning correctly. This is typically accomplished through establishment of a test database and processing of test transactions that exercise system functions with the expectation of predictable outcomes for each test.

Stress and performance testing is often also a part of acceptance testing.

Acceptance testing is often linked to system or deliverable sign-off and acceptance by the procuring or funding agency.

Advance Planning Document (APD)—Document used to secure funding and approval of the project to automate State processes to administer the FNS FSP or WIC programs. This document records information for the APD process, which is designed to: (1) describe in broad terms the State agency's plan for managing the design, development, implementation, and operation of a system that meets Federal, State, and user needs in an efficient, comprehensive, and cost-effective manner; (2) establish system and FNS program performance goals in terms of projected costs and benefits; and (3) secure FFP for the State agency.

Advance Planning Document Update (APDU)—Annual or as-needed documentation submitted by the State agency on the status of project development activities and expenditures in relation to the approved PAPD. An annual APDU is due within 90 days of the approval date of the initial IAPD or PAPD. An APDU may also be submitted as needed to request funding approval for project continuation whenever significant project changes occur or are anticipated.

Advance Planning Document Closure—Closure of either a PAPD or an IAPD that occurs when all activities associated with the project, approved through the APD, have been successfully completed to the satisfaction of FNS and any other contributing Federal agencies. Once APD closure occurs, any additional changes to the system, such as software enhancements or hardware replacement, will be considered a new project, and the new project is subject to the requirements for Federal approval of FFP that are appropriate to the type and size of the new project. After APD closure, reports on project results, such as operating costs and system functionality, may still be required by FNS. Closure must be documented by RO notification to the State agency.



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Advance Planning Document Process —Process used by several Federal agencies to receive and approve State agency requests for Federal funding or FFP for IS.

<u>Alternatives Analysis</u>—Key part of the Feasibility Study in which alternatives for primary system requirements and resources are contrasted and compared, with the aim of determining the best viable alternative. Comparative analysis includes development resources, implementation resources, functional requirements, hardware and software requirements, and M&O support and costs.

**Benefiting Program**—State or Federal public assistance program that uses some or all of the functions of a State agency's automated computer system. For example, the Food Stamp Program, Medicaid, TANF and Child Support Enforcement may all be benefiting programs in a shared State computer system that determines applicants' eligibility.

Best and Final Offer (BAFO)—Technical and cost proposal submitted by a vendor to a State or local agency, after all negotiations are concluded and that is the offer upon which the contracting decision is made.

**Business Rules Engine**—Software that applies business rules to a decision-making process in a software application. The rules may come from legal regulation (the categories of person eligible for a program), state policy (whether and how to count certain assets), or other sources. The rules engine software, among other functions, may help classify, prioritize and manage all these rules; verify consistency of formal rules; and relate rules to multiple applications as appropriate. Rules can also be used to detect certain situations automatically.

Capacity—Measure of a State agency's output; for example, program participation rates or other Federal reporting requirements

Case Conversion—Process of changing over the caseload from the old system to the new system. This is often accomplished in phases, with different State subdivisions being converted at different stages. A case conversion plan, outlining the strategy, requirements, schedule and validation process for transfer of the caseload to the new system and related data conversion, should be included in the IAPD.

**CASE Tools**—Computer-aided software engineering tools used to assist in managing the software development process, including defining requirements, creating specifications, and writing software code. CASE tools use various software methodologies embodied in the tool and may include data flow diagrams, data dictionaries, process control specifications, object diagrams, and entity relation diagrams.

Cognizant Federal Agency—Federal agency charged with reviewing, negotiating, and approving the Cost Allocation Plan of a given State or local government agency. Cognizance is generally assigned to the Federal agency that has the greatest dollar involvement with the grantee. It may differ for ongoing operational costs and for a specific project, such as an ADP project.

<u>Configuration Management</u>— Control of changes, including the recording thereof, that are made to the hardware, software, firmware, and documentation throughout the system life cycle.

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<u>Configuration Management Plan</u>—Detailed plans for each project's CM activities. It identifies CM resources, schedules, and procedures and practices, such as the identification scheme and products to be managed.

<u>Contract</u>—Legal agreement between the State or local agency and other organization(s) (e.g., the firm and grantee) to provide IS services or equipment

<u>Contractor</u>—Firm or vendor that is party to a contract to provide equipment, services, or supplies in support of FNS-funded IS

<u>Contractor and Procurement Documentation</u>—Collection of legal and binding documentation that has been agreed to for a specific contract

<u>Cost Allocation</u>—Procedure that State agencies use to identify, measure, and equitably distribute system costs among benefiting State and Federal public assistance programs

<u>Cost Allocation Methodology</u>—Specific method or approach the State agency uses to determine each benefiting program's portion of the shared system costs

<u>Cost Allocation Plan</u>—Document that State agencies submit to Federal benefiting programs for approval during the APD process to obtain Federal funding for a portion of State system costs. It documents the State agency's cost allocation methodology and shows the proposed benefiting programs' share of cost (%) and dollar (\$) amount. Each Federal benefiting program must approve the State agency's cost allocation plan.

<u>Cost-Benefit Analysis</u>—Mechanism for classifying alternative systems into cost and benefit components to determine which alternative will provide the greatest benefits relative to its cost. The CBA provides a meaningful comparison of the costs of the alternatives being considered.

<u>Data Conversion</u>—Activity involved in creating a data file from existing files, either manually or through electronic means; a critical process during system development when data is converted from an existing system, paper or automated, to the new system, tested for correctness and data integrity

<u>Detail System Design</u>—Document that specifies the program/file level design of a system. It describes a software product that a software designer writes to guide a software development team in the architecture of the software project. It usually accompanies an architecture diagram and has pointers to the detailed feature specifications of smaller pieces of the design. A design document is practically required to coordinate a large team under a single vision. It needs to be stable reference and outline all parts of the software and how they will work. The document should give a fairly complete description while maintaining a high-level view of the software. Detail System Design is a comprehensive software design model consisting of four distinct but interrelated activities: data design, architectural design, interface design, and procedural design.

<u>Direct Charges</u>—Charges for costs of system capabilities that benefit only a single Federal or State program. In cost allocation methodology, direct charges are identified and then removed from the cost allocation pool.

<u>Direct Costs</u>—Costs for system functions benefiting only a single Federal or State program



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**<u>Disallowance</u>**—Recovery of funds that were inappropriately charged to an FNS grant

<u>Electronic Benefits Transfer</u>—Use of electronic mechanisms to transfer value from a program to a benefit recipient

<u>Electronic Service Delivery</u>—Use of a unique client identifier and advanced electronic technology to provide integrated and efficient client-centric service delivery

<u>Emergency Acquisition Request</u>—Documentation required for a situation in which the following conditions both exist:

- The State agency can demonstrate to FNS an immediate need to acquire IS equipment or services to continue operation.
- The State agency can clearly document that the need could not have been anticipated or planned for and that the need prevents the State from following the prior approval requirements.

## <u>Enhancement – A major enhancement is a software change that significantly increases risk, cost, or functionality of the system.</u>

**Enterprise**—The whole (or portion) of the State agency (or additional agencies) that is affected by change in the IT infrastructure. This scope is necessary to establish the boundaries, within which the State agency decision makers can manage the interoperability and integration within and across this boundary.

<u>Feasibility Study</u>—Preliminary study to determine whether it is sufficiently probable that the use of IS equipment or systems would improve the effectiveness and efficiency of program operations and warrant the investment of staff, time, and money being requested and whether the plan can be accomplished successfully

<u>Federal Financial Participation</u>—Portion or amount of allowable costs (up to 100 percent) that a Federal grantor agency provides through a grant, contract, or other agreement. Specifications shall be based upon a clear level of funding established through legislation or regulation. This is the net amount provided by the Federal participating agency.

<u>Functional Requirements Document</u>—Initial definition of the proposed system, which documents the goals, objectives, and user or programmatic requirements. This document details what the new system and/or hardware should do, not how it is to do it. Specifications shall be based upon a clear and accurate description of the functional requirements for the project and shall not, in competitive procurement, lead to requirements that unduly restrict competition. The FRD specific to the WIC program includes EBT readiness and functionality.

General System Design— Combination of narrative and diagrams describing the generic architecture of a system, as opposed to the detailed architecture of the system. It may include a system's diagram; a narrative identifying overall logic flow and systems functions; a description of equipment needed (including processing, data transmission, and storage requirements); a description of other resource requirements that will be necessary to operate the system; a description of system performance requirements; and a description of the environment in which the system will operate, including how the system will function within the environment.

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<u>Independent Verification and Validation (IV&V)</u> - IV&V is a review process performed by an organization that is technically, managerially, and financially independent of the development organization. **Verification** is using iterative processes to determine whether the products produced fulfill the requirements placed on them by previous iterations/phases/steps and are internally complete, consistent, and sufficiently correct to adequately support the next iteration/phase/step. **Validation** is the process of examining and exercising the complete application (software, hardware, procedures, and all else) to determine whether all stakeholders requirements have been met.

<u>Implementation Advance Planning Document</u>—Written plan of action requesting FFP (or approval to expend Federal funds) to acquire and implement IS services and/or equipment

<u>Information System</u>—Combination of computer hardware and software, data, and telecommunications that performs functions to support the State agency, or other Federal, State or local organizations

<u>Information System Services</u>—Services to design, develop, or operate IS equipment, either by private sources or by employees of the State agency or by State or local organizations other than the State agency to perform such tasks as:

- Feasibility studies
- System studies
- System design efforts
- Development of system specifications
- System analysis
- Programming
- System implementation
- Maintenance
- Operations
- Backup and recovery
- Disposition.

IS services also include system training, system development, site preparation, data entry, and personnel services related to IS development and operations.

<u>Information Technology</u>—Processing equipment, interconnecting (networking) equipment, and the software entities that operate with this equipment

<u>Integration Testing</u>—The phase of the system development life cycle in which application programs or modules that were separately developed and tested are brought together and operated as a single system. The objective of integration testing is to ensure that all elements of



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a system function correctly according to specifications and defined requirements as a single entity.

Integration testing ensures that data or outputs from one program or module that function as input to, or is used by, another program or module are correctly processed. Integration testing also ensures that data integrity is maintained throughout the system.

<u>Invitation for Bid</u>—Type of solicitation document used in formal advertising, where the primary consideration is cost and the expectation is that competitive bids will be received and an acceptance (award) issued to the low responsive, responsible bidder

**Legacy System**—Jargon for an IS (or set of applications) that is currently in use and was initially deployed many years ago, using a computing infrastructure that is several generations old. These systems tend to be critical to the business and cannot be easily replaced or costeffectively maintained; however, they are approaching or have reached the end of their practical operational life span

**Maintenance**—Process of modifying a system or component after delivery to correct faults, improve performance or other attributes, or adapt to a changed environment, with the purpose of maintaining the value of the existing system

Management Plan—Document describing the process that a specific contractor will use to manage their activities

<u>Migration</u>—Process of transferring all or part of an IS' functionality, data, or communications to another technical infrastructure. The original application code may be ported or replaced. The business data and its schema are usually retained in a significant way.

**Operational**—Term with both general and specific meanings in FNS programs. As a general concept, operational refers to the point in the project development at which the major functions of the automated system are functioning to support program activity. For example, the new system is being used to certify recipients and to provide benefits in local offices. An IS system may become operational before all project work included in an approved APD is completed. For example, a system may be considered operational, although there are still ancillary functions being built, cases to be converted, or some geographic areas needing installation of the system. A system is considered truly operational statewide once all development under the IAPD is completed, all sites are fully operational, and all work has been accepted by the State agency. Operational also signifies the point at which the reporting of costs moves from the Automated Data Processing (ADP) Development to ADP Operational on the FNS-269 of FNS-798 documents submitted by all State agencies. The closure of an APD may occur after a system is considered fully operational statewide.

In the specific meaning, operational refers to the FSP regulatory meaning for implementation of Food Stamp Act provisions for enhanced funding for development projects. For projects with phased implementation, each State subdivision (as outlined in the Case Conversion or Implementation/Rollout Plan) shall be considered operational at the time that the system produces automated application processing and/or issuance for the Food Stamp caseload for that subdivision.

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<u>Order of Precedence</u> – Clause or paragraph included in a contract citing the order of importance of documents to be used in the definition of terms and work and most importantly in dispute resolution, should questions or challenges arise.

<u>Planning Advanced Planning Document</u>—Written plan of action to determine the need for, feasibility of, and projected costs and benefits of an IS equipment or services acquisition. PAPDs are used by States to receive Federal funding for the costs of planning for the development and/or implementation of a system, including acquisition of equipment or services.

<u>Platform</u>—Collection of tightly integrated computing hardware, peripherals, OS, and middleware upon which an application is built. The application provides some of its functionality by accessing services residing on the application platform through a program interface.

**<u>Project</u>**—Effort directed toward achieving a specific goal that has been assigned specific resources and duration. Projects are the context in which all development work is done for a program.

<u>Proposal</u>—Offer that includes a description of proposed technical approach and associated costs, is received as a response to an RFP, and is subject to negotiation

<u>Quality Assurance</u>—Planned and systematic set of actions to provide adequate confidence that work products and the processes used to produce them conform to established requirements

<u>Quality Assurance Plan</u> —Plan for each project's QA activities, defining QA resources and schedules, detailing QA procedures and practices and how noncompliance issues are to be handled, and identifying the products or processes to be reviewed or audited

**Regular Funding or Regular Federal Financial Participation Rate**—Federal reimbursement at the 50 percent level for allowable costs for State agency planning, design, development, or installation of IS; this definition applies only to the FSP

<u>Request for Proposals</u>—Type of solicitation document used in negotiated procurements with the expectation that proposals will be received and evaluated leading to an award without discussion, or a revised proposal after discussion, which will then lead to an award

<u>Request for Quotation</u>—Type of solicitation document used for negotiated small purchases and sometimes for information purposes. Response to an RFQ under the latter circumstances is only informational and is not a binding offer.

<u>Risk Management Plan</u>—Document that describes the risk analysis and management processes to be used, including a listing of current risks, their priority, and planned strategies for their mitigation

<u>Server</u>—A computer or device on a network that manages network resources. A processor or host that performs operations at the request of local or remote clients. For example, a file server is a computer and storage device dedicated to storing files. A print server is a computer that manages one or more printers, and a network server is a computer that manages network traffic. A data base service is a computer system that processes database queries. Servers are often dedicated, meaning that they perform no other tasks besides their server tasks. On



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multiprocessing operating systems, however, a single computer can execute several programs at once. A server in this case could refer to the program that is managing resources rather than the entire computer.

<u>Service Agreement</u>—Document signed by the State or local agency and the State or local IT department for IT services—such as telecommunications, network installation and maintenance, hardware installation, and maintenance system planning services—provided to the State or local agency

**Software**—A set of computer programs, procedures, and associated documentation used to operate the hardware and/or administer and manage FNS programs

<u>State</u>—Any of the 50 States of the United States, the District of Columbia, Puerto Rico, Guam, the Northern Marianna Islands, the U.S. Virgin Islands, and the reservation of an Indian Tribal Organization that meets the requirements for participation as a State agency as defined by individual FNS programs

<u>State Agency</u>—Agency of a State government (including the local offices thereof) responsible for the administration of the Federally aided public assistance programs in the State, and in those States where such programs are operated on a decentralized basis, including the local agencies that administer such assistance programs for the State agency; also, an Indian Tribal Organizations of any Indian tribe determined by the Department to be capable of effectively administering a FSP WIC or a Food Distribution Program, in accordance with provisions of the Food Stamp Act of 1977

<u>Statement of Work</u>—Portion of an RFP or RFQ that identifies the products or services sought through a procurement, typically, detailing tasks or services a vendor will be required to provide, conditions under which they will be provided, deliverables to be provided, and (often) the project schedule or required milestones

<u>Status Reports</u> —Information a contractor provides to the State Agency regarding performance progress or issues for a specific contract

**Subagency**—Any State or local government entity to which the State agency provides FNS funds in connection with the administration of FNS programs

<u>Subcontractor</u>—A\_private, profit, or nonprofit organization that performs a portion of the services required by a State agency through a contractual agreement with the prime contractor

**System Architecture**—Representation of a system in which there is a mapping of functionality onto hardware and software components, a mapping of the software architecture onto the hardware architecture, *and* human interaction with these components. An architecture description is a formal description of a system, organized in a way that supports reasoning about the structural properties of the system. It defines the [system] components or building blocks and provides a plan from which products can be procured, and systems developed, that will work together to implement the overall system. It enables management of IT investment to meet business needs

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**System Design**—Specification of the working relations between all the parts for systems in terms of their characteristic actions

System Development Life Cycle (SDLC) – is defined as a software development process, although it is also a distinct process independent of software or other Information Technology considerations. It is used by a systems analyst to develop an IS, including requirements, validation, training, and user ownership through investigation, analysis, design, implementation, and maintenance. SDLC is also known as IS development or application development. An SDLC should result in a high quality system that meets or exceeds customer expectations, within time and cost estimates, works effectively and efficiently in the current and planned information technology infrastructure, and is cheap to maintain and cost-effective to enhance.

The SDLC is a systematic approach to problem solving and is composed of several phases, each comprising multiple steps: the <u>software</u> concept identifies and defines a need for the new system; requirements analysis analyzes the information needs of the end users; the architectural design creates a <u>blueprint</u> for the design with the necessary specifications for the hardware, software, people, and data resources; <u>coding</u> and <u>debugging</u> creates and programs the final system; and system testing evaluates the system's actual functionality in relation to expected or intended functionality.

The six official phases are: Preliminary Investigation or Planning, Systems Analysis, Systems Design, Systems Development or Construction, Systems Implementation, and Systems Maintenance.

<u>System Specifications</u>—Exact models, brands, and suppliers for each software application and hardware device; information about the new IS system, such as workload descriptions, input data, information to be maintained and processed, data processing techniques, and output data, required to determine the IS equipment and software necessary to implement the system design

**System Study**—Examination of existing information flow and operational procedures in an organization

<u>Use Case</u>—Technique for capturing functional requirements of systems and systems of systems. Each use case provides one or more *scenarios* that convey how the system should interact with the users, called actors, to achieve a specific business goal or function.

<u>Waiver of Depreciation</u>—Written request to change the method of accounting and claiming for the cost of equipment. Federal cost circulars require that individual items of equipment that cost more than \$25,000 per item, must be charged over the useful life of the equipment. (Useful life is as proscribed by the IRS. Workstations have a useful life of 3 years, while mainframes are normally charged over a period of 7 years.) The written request asks for agency permission to charge the entire cost of the equipment acquisition at the time of acquisition (more commonly known as "expensing"). Unless agency permission is received, the equipment cost must be based on depreciation over the life of the equipment.

