CHAPTER 5 TABLE OF CONTENTS

Note: Passport Advantage Terms and Conditions previously in 5.15.13 now located in Appendix S.

CHAPTER 5. SPECIAL ITEM 132-33: PERPETUAL SOFTWARE LICENSE

TERMS AND CONDITIONS

Note: These terms and conditions are applicable to the licensing of IBM licensed programs, and are in addition to those described in Chapter 1, General Information.

During the contract period, International Business Machines Corporation (IBM) and the Government agree that the following terms and conditions will apply to any order for IBM licensed programs that is placed by the Government under this Special Item. The term "Government" shall mean all Federal agencies (as defined in Paragraph (b) of 40 USC 472), the Senate, the House of Representatives, the Architect of the Capitol, and the Government of the District of Columbia, all of which are hereinafter referred to as the Government. The materials and services under this Special Item 132-33 will be available to the Government within the United States, the District of Columbia and Puerto Rico. On a case-by-case basis IBM will deliver products and perform services to overseas U.S. Government locations which are in support of national or mutual defense operations (including U.S. Embassies), and to locations which support the national interest of the United States.

SOFTWARE MAINTENANCE

a. Software maintenance as it is defined: (select software maintenance type) :

_____X_____   1. Software Maintenance as a Product (SIN 132-32 or SIN 132-33)

Software maintenance as a product includes the publishing of bug/defect fixes via patches and updates/upgrades in function and technology to maintain the operability and usability of the software product. It may also include other no charge support that are included in the purchase price of the product in the commercial marketplace. No charge support includes items such as user blogs, discussion forums, on-line help libraries and FAQs (Frequently Asked Questions), hosted chat rooms, and limited telephone, email and/or web-based general technical support for user's self diagnostics.

Software maintenance as a product does <u>NOT</u> include the creation, design, implementation, integration, etc. of a software package. These examples are considered software maintenance as a service.

_____   2. Software Maintenance as a Service (SIN 132-34)

Software maintenance as a service creates, designs, implements, and/or integrates customized changes to software that solve one or more problems and is not included with the price of the software. Software maintenance as a service includes person-to-person communications regardless of the medium used to communicate: telephone support, on-line technical support, customized support, and/or technical expertise which are charged commercially. Software maintenance as a service is billed arrears in accordance with 31 U.S.C. 3324.

b. Invoices for maintenance service shall be submitted by the Contractor on a quarterly or monthly basis, after the completion of such period. Maintenance charges must be paid in arrears (31 U.S.C. 3324). PROMPT PAYMENT DISCOUNT, IF APPLICABLE, SHALL BE SHOWN ON THE INVOICE

5.1 INSPECTION/ACCEPTANCE

The Contractor shall only tender for acceptance those items that conform to the requirements of this contract. The ordering activity reserves the right to inspect or test any software that has been tendered for acceptance. The ordering activity may require repair or replacement of nonconforming software at no increase in contract price. The ordering activity must exercise its post-acceptance rights as defined in IBM's license terms (1) within a reasonable time after the defect was discovered or should have been discovered; and (2) before any substantial change occurs in the condition of the software, unless the change is due to the defect in the software.

Acceptance – see IBM's ICA and IPLA license terms for the definition of Acceptance.

5.2 GUARANTEE/WARRANTY

IBM' standard commercial guarantee/warranty is specified in the terms and conditions of the ICA and IPLA license terms stated elsewhere in this chapter.

Limitation of Liability. Except as otherwise provided by an express or implied warranty, the Contractor will not be liable to the ordering activity for consequential damages resulting from any defect or deficiencies in accepted items.

5.3 TECHNICAL SERVICES

IBM provides technical support for software licenses as specified in its standard commercial license terms and conditions (see ICA and IPLA license terms).

5.4 SOFTWARE MAINTENANCE

IBM's Software maintenance terms are provided herein under the Acquisition of Software Maintenance and Passport Advantage terms.

5.5 UTILIZATION LIMITATIONS

a. Software acquisition is limited to commercial computer software defined in FAR Part 2.101.

b. When acquired by the ordering activity, commercial computer software and related documentation so legend shall be subject to the following:

   1. Title to and ownership of the software and documentation shall remain with the Contractor, unless otherwise specified.

2. Software licenses are by site and by ordering activity. An ordering activity is defined as a cabinet level or independent ordering activity. By mutual agreement between IBM and the ordering activity, the software may be used by any subdivision of the ordering activity (service, bureau, division, command, etc.) that has access to the site the software is placed at, even if the subdivision did not participate in the acquisition of the software. Further, the software may be used on a sharing basis where multiple agencies have joint projects that can be satisfied by the use of the software placed at one ordering activity's site. This would allow other agencies access to one ordering activity's database. For ordering activity public domain databases, user agencies and third parties may use the computer program to enter, retrieve, analyze and present data. The user ordering activity will take appropriate action by instruction, agreement, or otherwise, to protect the Contractor's proprietary property with any third parties that are permitted access to the computer programs and documentation in connection with the user ordering activity's permitted use of the computer programs and documentation. For purposes of this section, all such permitted third parties shall be deemed agents of the user ordering activity.

3. Except as is provided in paragraph 8.b(2) above, the ordering activity shall not provide or otherwise make available the software or documentation, or any portion thereof, in any form, to any third party without the prior written approval of the Contractor. Third parties do not include prime Contractors, subcontractors and agents of the ordering activity who have the   ordering activity's permission to use the licensed software and documentation at the facility, and who have agreed to use the licensed software and documentation only in accordance with these restrictions. This provision does not limit the right of the ordering activity to use software, documentation, or information therein, which the ordering activity may already have or obtains without restrictions.

4. (4) The ordering activity shall have the right to use the computer software and documentation with the computer for which it is acquired at any other facility to which that computer may be transferred, or in cases of disaster recovery, the ordering activity has the right to transfer the software to another site if the ordering activity site for which it is acquired is deemed to be unsafe for ordering activity personnel; to use the computer software and documentation with a backup computer when the primary computer is inoperative, for a temporary period of time; to copy computer programs for safekeeping (archives) or backup purposes; with IBM's written consent, to transfer a copy of the software to another site for purposes of benchmarking new hardware and/or software; and to modify the software and documentation or combine it with other software, provided that the unmodified portions shall remain subject to these restrictions.

5. Commercial Computer Software" may be marked with the Contractor's standard commercial restricted rights legend, but the schedule contract and schedule pricelist, including this clause, "Utilization Limitations" are the only governing terms and conditions, and shall take precedence and supersede any different or additional terms and conditions included in the standard commercial legend.

5.6 SOFTWARE CONVERSIONS - (132-32 AND 132-33)

As a general rule, IBM does not offer full monetary credit to the Government when conversion from one version of the software to another which is made as the result of a change in operating system, or from one computer system to another;; however, IBM offering for the Acquisition of Software Maintenance or Passport Advantage includes terms on version updates for IPLA Licensed Programs. In addition, IBM has a software migration plan for its ICA Program Licensed products which is available under the terms of Single Version Charging. Such terms are stated elsewhere in this Chapter.

5.7 DESCRIPTIONS AND EQUIPMENT COMPATIBILITY

IBM provides a list of software products and their description in this pricelist. Additional details regarding the IBM software products can be found on IBM's internet site: www.ibm.com.

5.8 GENERAL INFORMATION

Under these terms and conditions, IBM will (1) furnish licensed programs to the Government, (2) furnish materials in support of such licensed programs, and (3) provide program services, as described herein. The Government agrees with respect to the licensed programs to accept the responsibility for (1) their selection to achieve the Government's intended results, (2) their installation, (3) their use, and (4) the results obtained there from. The Government also has the responsibility for the selection and use of, and results obtained from, any other programs, programming equipment, or services used with the licensed programs.

None of the licenses granted hereunder nor any of the licensed programs or copies thereof may be sub-licensed, assigned, or transferred between agencies or departments, including military departments without the prior written consent IBM. Any attempt to sub-license, assign, or transfer any of the rights, duties, or obligations under this Special Item 132-33 is void.

IBM is not responsible for failure to fulfill its obligations under this Special Item due to causes beyond its control.

The Government agrees that all of the terms and conditions of this Special Item applicable to restricted materials shall be applicable to materials, regardless of form, labeled "Restricted Materials of IBM" when distributed to the Government.

5.9 ORDERS

Software Acquisition is limited to commercial computer software defined in FAR Part 2.101.

Each order shall list the licensed program(s), feature(s), and/or material(s), and shall show the type and serial of the designated machine(s) on which each program and/or material are to be used, and the location of such machines. The Customer Requested Arrival Date shall be written into the order and the order shall be forwarded to IBM. In the event that IBM can't meet the Customer Requested Arrival Date, IBM shall notify the Government within 30 calendar days from the date of the certified mail receipt or the order receipt date of the Calculated Arrival Date

which it can meet. Otherwise, the Customer Requested Arrival Date automatically becomes the Calculated Arrival Date.

5.10 RISK OF LOSS

If licensed programs in a tangible form are lost or damaged during shipment from IBM, IBM will replace such licensed programs and program storage media at no additional charge to the Government.

If licensed programs are lost or damaged while in the possession of the Government, IBM will replace such licensed programs at the then current commercial charges, if any, for processing, distribution, and/or program storage media. Such charges will be outside the scope of this Contract.

5.11 COMPLIANCE VERIFICATION

The Government agrees to create, retain, and provide to IBM and its auditors written records, system tool outputs, and other system information sufficient to provide auditable verification to IBM that your installation and use of Licensed Programs is in compliance with the terms herein. Unless otherwise mutually agreed to, upon 30 days written request, and no more frequently than annually, IBM may audit the use of programs provided under any order.

You further agree that IBM and its auditors may verify your compliance with the terms herein by, among other things, having reasonable access to premises in which you use or install Licensed Programs. IBM agrees to use personnel with appropriate security clearances when required. You agree to pay promptly any additional charges to which You become obligated as determined by an audit. The provisions in this paragraph shall remain in effect during the term of this Agreement and for a reasonable time thereafter to confirm deployment and use of the Licensed Programs during the term of this Agreement

5.12 CHARGES, INVOICES, AND PAYMENTS

The charges applicable to each licensed program may be a one-time charge, an upgrade charge, a periodic charge and any initial or process charge.

One-time and recurring charges may be based on measurements of actual or authorized use (for example, number of users or processor size). The Government agrees to provide actual usage data if IBM specifies. If the Government changes its environment such that it impacts use charges (for example. change to processor size or configuration for Programs), the Government agrees to promptly notify IBM and provide a modification for any applicable charges. IBM does not give credits or refunds for charges already due or paid. In the event that IBM changes the basis of measurement, its terms for changing charges will apply.

Initial License Charge (ILC):

In addition to some programs which have a monthly license charge, an ILC charge will apply. The ILC is billed along with the first MLC invoice (see Periodic Charges below).

One time Charges (OTC):

For new program license orders, in the event a price increase occurs from the date of signature on the delivery order to the date of receipt by IBM, IBM will honor the lower price of the order if received within the validity date on the proposal quote or if the order was received within 15 days of the signature date on the delivery order. Should the order be received after the validity date of the proposal or the 15 day period, a new or modified order will be required that reflects the current catalog price. IBM will invoice the Government for OTC software products upon shipment.

Periodic Charges:

S/390 and zSeries Platform Programs:

Recurring charges for S/390 and zSeries platform programs, which may be monthly license charges (MLC) or annual license charges (ALC), will be calculated in full calendar month increments.

For new installations and product alterations (other than discontinuances) occurring on the first of a month, charges will begin immediately.

For new installation and products alterations occurring after the first day of the month, charges will begin the first day of the month after installation.

Products discontinued the first of a month or during a month will be charged through to the end of the month.

NON S/390 and zSeries Platform Programs:

Other platform programs with recurring charges (MLC or ALC charges) will begin billing upon the Date of Installation. If applicable, charges will be prorated based on a thirty (30) day month.

All Platform Programs:

Charges for renewal(s) of licensed programs which have been withdrawn from marketing are specified in this price list.

Charges will be invoiced at the end of the period for which the charges accrue.

For new program license orders, in the event a price increase occurs from the date of signature on the delivery order to the date of receipt by IBM, the periodic charge shall be the charge in effect upon the Date of Installation.

Primary License Charge (PLC):

A Primary License Charge applies to programs which are billed as an Annual License Charge. The PLC is billed as an one time charge upon the Date of Installation of the licensed program.

Program Upgrade Charge:

For selected licensed programs, IBM may designate a replacement program which is normally a new version of an existing program. If the product was offered as OTC, the replacement version may be offered for a Program Upgrade Charge, which is a one-time charge that is less than the full OTC amount.

The Government may qualify for the Program Upgrade Charge, if the prior version of the licensed program is discontinued upon installation of the new version.

Process Charge:

A process charge is usually a distribution charge or media charge for machine-readable materials.

Charges will be due upon receipt by the Government of the licensed programs to which such charges apply and are not refundable.

Payment:

Per FAR 52.212-4 payment is due in accordance with the Prompt Payment Act.

In the event that the Government is of the opinion that any charges or credits on an invoice are not billed properly, every effort should be made to promptly pay the portion of the invoice not in question and give detailed written notice to IBM concerning the items in question.

5.13 CROSS FISCAL YEAR FUNDING

IBM will accept orders which cross fiscal years provided the ordering agency's specific appropriation authority provides for funds in excess of a 12 month (fiscal year) period. The Government's purchase order shall specify the availability of funds and the period for which funds are available.

5.14 LICENSE AGREEMENT FOR "ICA" PROGRAMS

Upon acceptance of a Government order, IBM grants a non-exclusive, non-transferable license to use the Program. Programs are owned by IBM or one of its subsidiaries and are copyrighted and licensed (not sold).

Authorized Use

Under each license, IBM authorizes the Government to:

A. Use the ICA Program's machine-readable portion on only the Designated Machine unless--

 1. The Designated Machine is inoperable. The Government may then use the Program on another machine temporarily.

 2. The Designated Machine cannot assemble or compile the Program. The Government may then assemble or compile the program on another machine.

 3. If the Government changes a Designated machine previously identified to IBM, you agree to notify IBM of the change and its effective date.

B. Use the ICA Program to the extent of the Government's authorization obtained for the Program(s),

C. Make and install copies of the ICA Program to support the level of use authorized, provided the Government reproduces the copyright notices and any other legends of ownership on each copy or partial copy, and

D. Use any portion of the ICA Program IBM (1) provides in source form, or (2) mark restricted (for example, "Restricted Materials of IBM") only to

a. Resolve problems related to the use of the Program, and

b. Modify the ICA Program so that it will work together with other products.

Government's Additional Obligations

A. The Government agrees to comply with any additional or different terms in its Licensed Program Specifications may contain, including other offerings stated herein.

B. Ensure that anyone who uses the Program (accessed either locally or remotely) does so only for the Government's authorized use and complies with these terms; and

C. Maintain a record of all copies and provide it to IBM at its request

Actions the Government May Not Take

The Government agrees not to do any of the following:

A. Sublicense, assign, or transfer the license for any Program between agencies or departments, including military departments;

B. Sublicense, assign, rent, or lease the Program to any third party without IBM's prior written consent;

C. Reverse assemble, reverse compile, otherwise translate, or reverse engineer the ICA Program unless expressly permitted by applicable law without the possibility of a contractual waiver.

5.14.1 DATE OF INSTALLATION

For a Program:

A. Basic license: The second business day after the Program's standard transit allowance period, B. Copy, the date specified in a Transaction Document, on which IBM authorizes the Government to make a copy of the Program; or

C. Chargeable component, the date the Government distributes a copy of a chargeable component in support of the Government's authorized use of the Program.

5.14.2 ACCEPTANCE

A. On the second business day after the Program's standard transit allowance period, or receipt of the Program, if earlier.

B. For process charges, the date the materials for which the process charges apply are received by the Government.

Not withstanding anything herein to the contrary, the parties agree as follows:

(i) the ordering activity may negotiate an extension regarding the time of acceptance before issuing a delivery order; and (ii) the parties may mutually agree on the acceptance period for overseas orders.

5.14.3 WARRANTY

Each licensed program which is designated in the Price List as warranted will conform to the Specifications in effect when shipped to the Government if properly used in a Specified Operating Environment. The warranty period for a Program commences on its Date of Installation and expires when its Program Services are no longer available. Thereafter, IBM will provide program services on a chargeable basis as described elsewhere in this SIN. During the warranty period, IBM provides defect related Program Services without charge.

Program Services are available for a warranted Program for at least one year following its general availability.

EXTENT OF WARRANTY/ITEMS NOT COVERED BY WARRANTY

The warranties stated herein will not apply to the extent there has been misuse, accident, modification, unsuitable physical or operating environment, operation in other than the Specified Operating Environment, improper maintenance by the Government, or failure caused by a product for which IBM is not responsible.

THESE WARRANTIES ARE YOUR EXCLUSIVE WARRANTIES AND REPLACE ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

IBM does not warrant uninterrupted or error-free operation of a Product or Service or warrant that all defects will be corrected.

Unless specified otherwise, IBM provides Materials and non-IBM products, without warranties of any kind. However, non-IBM manufacturers, developers, suppliers, or publishers may provide their own warranties to you. Warranties, if any, for Other IBM Programs and Non-IBM Programs may be found in their license agreements.

5.14.3.1 REMEDIES

If a Program does not function as warranted during the first year after the Government obtains the license, and IBM is unable to make it do so, the Government may return the program and receive a full refund of the amount paid. To be eligible, the Government must have obtained the license while Program services were available for it.

In no event will IBM be liable for any damages arising from performance or nonperformance of the licensed program during the licensed program testing period or for any damages caused by the Government's failure to perform the Government's responsibilities, or for any claim against the Government by any other party, except as provided in General Information terms for "Patent and Copyright Indemnity," and "Limitation of Liability."

5.14.4 PROGRAM COMPONENTS NOT USED ON THE DESIGNATED MACHINE

Some Programs have components that are designed for use on machines other than the Designated Machine on which the Program is used. The Government may make copies of a component and its documentation in support of its authorized use of the Program provided the Government. For chargeable components, the government agrees to notify IBM of the component's actual date of distribution which is its Date of Installation.

5.14.5 DISTRIBUTED SYSTEM LICENSE OPTION

A. For certain Programs the Government may make a copy under a Distributed System License Option (called a "DSLO" copy). When ordering additional licenses for such a licensed program, the Government must designate whether an additional Basic or DSLO License is requested. IBM charges less for a DSLO license than for a Basic license. For each DSLO License, the Government will:

1. Have a Basic license for the Program;

2. Provide problem documentation and receive Program Services (if any) only through the location of the Basic License;

3. Distribute to, install, and test on the DSLO's Designated Machine any new release, correction or bypass provided by IBM to the Basic License.

4. IBM does not provide a testing period for DSLO copies.

B. Unless the Government designates another Basic License, notice of discontinuance of a Basic License shall be notice of discontinuance of all DSLO licenses for that Basic License.

5.14.6 SPECIFIED OPERATING ENVIRONMENT

The specified operating environment is the environment in which a licensed program is designed to operate, which may be one or more IBM machine types and, in most instances, in conjunction with other IBM equipment and programs. The Licensed Program Specifications, for each warranted licensed program, will state the environment in which the licensed program is designed to operate. For licensed programs distributed on an "AS IS" basis the Specified Operating Environment will be stated in a notice of availability.

Program services for a licensed program used in other than a Specified Operating Environment are subject to limitations occasioned by the differences between the Specified Operating Environment and the Government's operating environment and by the extent of the local IBM representative's knowledge of the Government's equipment and programs. Such program services will be subject to the following conditions:

The Program Service project office will only respond to defects which will occur when they operate the licensed program in a Specified Operating Environment.

Furthermore, the IBM representative will only operate a machine designated in the order if it was marketed or manufactured by IBM. IBM will have the right to make additional charges, in

accordance with Appendix C of this Price List, for any additional effort required to perform these program services.

5.14.7 LICENSED PROGRAM SPECIFICATIONS

For each licensed program which is warranted, IBM will have published, at the time that licensed program becomes available, a document entitled "Licensed Program Specifications." Such Licensed Program Specifications may be updated by IBM from time to time and such updates may constitute a change in specifications.

5.14.8 PERMISSION TO MODIFY

The Government may modify the program's machine readable instructions or data and merge them into another program to form an updated work for the Government's own use; provided that, upon discontinuance of the licensed program, the licensed programs will be completely removed from the updated work and dealt with under this Special Item as if permission to modify or merge had never been granted. Any portion of the licensed programs included in such an updated work will continue to be subject to all terms of this Special Item.

5.14.9 EARLY SHIPMENT OF LICENSED PRINTED MATERIALS

When the Government has issued and IBM has confirmed an order for a generally available licensed program, licensed program materials which are provided by IBM in printed form will, upon request, be shipped up to six months prior to shipment of the machine readable portion of the licensed program. The licensed printed materials, thus provided, may not be copied in any form for any purpose.

If the Government does not request that the machine readable portion of the licensed program materials be shipped within six months following the date of shipment of the licensed printed materials, the Government will discontinue the license for the program and return or destroy the printed materials.

Program services, if any, for the licensed program will not be provided prior to shipment or delivery of the machine readable portion of the licensed program materials.

5.14.10 PROGRAM TESTING

IBM provides a testing period for certain ICA Programs to help the Government evaluate if they meet your needs. If IBM offers a testing period, it will start 1) the second business day after the ICA Program's standard transit allowance period, or 2) on another date specified in a Transaction Document. IBM will inform you of the duration of the ICA Program's testing period.

IBM does not provide testing periods for DSLO copies.

In the event that the licensed program is used for productive purposes during the testing period, the testing period will be deemed to have ended as of the date upon which the Government commences productive use.

5.14.11 SHIPMENT OF PROGRAM LICENSE

Subject to conditions beyond IBM's control, licensed programs listed in this Price List will be shipped to the Government in time to meet the calculated arrival date confirmed by IBM.

Except when otherwise specified in this Price List, licensed programs will be shipped to the Government without shipping charge. Any special shipment requested by the Government will be at the Government's expense.

5.14.12 TERM / DISCONTINUANCE

Orders are effective from the date on which they are received by IBM and will remain in effect until cancelled by the Government upon written notice.

For S/390 and zSeries platform programs, the effective date of discontinuance will be the first of the month following IBM's receipt of the Government's written notice.

For all other software platform products IBM requires a one month's written notice for discontinuance. The Government may terminate a License at any time during the test period.

Whenever a license is cancelled or terminated by either party, the Government must promptly destroy all copies of the Program. The Government may retain a copy for archive purposes.

Licenses for certain replacement Programs may be obtained for an upgrade charge. When the Government obtains licenses for these replacement "ICA Programs", the Government agrees to terminate the license of the replaced Program when charges become due, unless IBM specifies otherwise.

IBM may discontinue any license upon written notice if the Government fails to comply with any of the terms and conditions of this Special Item. Such discontinuances will terminate the Government's authorization to use the Program.

Notice should also be provided for a discontinuance which occurs at the end of the fiscal year, but failure to give notice shall not be deemed as obligating the succeeding fiscal year's funds. All orders automatically terminate on September 30; however, ordering offices are instructed to notify IBM in writing one month prior to the expiration of the order if the license is to be discontinued at the end of the fiscal year. Renewal of an order under the new fiscal year will be required if the license is to be continued.

5.14.13 PROGRAM SERVICES

For each licensed program the period of program service, if any, to be provided for a current release of the licensed program is specified in IBM's GSA website www.ibm.com/easyaccess/gsa. Program service will commence at the beginning of the licensed

program testing period or, if there is no testing period for that license, when periodic charges are due. Program service will be subject to the provisions of "SPECIFIED OPERATING ENVIRONMENT," herein.

IBM provides Program Services for warranted "ICA" Programs per the terms stated herein. Terms for "Other IBM Program" Program Services are described in Item 5.8. If IBM can reproduce the reported problem in the Specified Operating Environment, IBM will issue defect correction information, a restriction, or a bypass. IBM provides Program Services for only the unmodified portion of a current release of a Program. Program Services are provided 1) on an on-going basis, IBM will provide at least six months' written notice before terminating this service for a Program, 2) until the date identified, or 3) for a period specified.

5.14.14 IBM VERSION 6 PRODUCT LIFECYCLE MANAGEMENT PROGRAMS

The terms herein for IBM Product Lifecycle Management Version 6 Programs ("Attachment") are in addition to those stated in the License Agreement for "ICA" Programs (Item 5.14). These terms apply to a Product Lifecycle Management Program that is licensed under the ICA Program License terms and is at Version 6 ("V6 PLM Program").

Capitalized terms used but not defined herein have the same meaning as given to them in the Agreement.

1. Definitions

Annual License Charge ("ALC") or **Recurring License Charge** ("RLC") is a recurring charge, for (i) an irrevocable (subject to the terms of the Agreement concerning license and agreement termination), nonexclusive and non-transferable right to use subsequent software releases of a specific V6 PLM Program that become generally available during the term of the ALC/RLC and (ii) associated Support Services.

Concurrent License – a license that authorizes use for a maximum number of simultaneous Users and Extended Enterprise Users (both as defined below), if applicable. A Concurrent License may also be referred to as a "**Shareable License**."

Development Tool Kit - a V6 PLM Program specifically designed for application or content development. Development Tool Kits are either identified (a) with "ENOVIA Studio" in the V6 PLM Program reference or (b) as Development Tool Kits in the product portfolio available at http://www.ibm.com/support/docview.wss?rs=886&context=SW860&uid=swg27012981

Extended Enterprise User - individual employee of an entity conducting business with Customer remotely through the Internet, such as a supplier or customer.

Machine-based License - a license that authorizes use on the number of Machines for which the V6 PLM Programs have been ordered. A Machine-based License may also be referred to as a "Nodelock License."

Named User - a User (as defined below) or Extended Enterprise User authorized by Customer with a unique user name and password to use the V6 PLM Programs running on a single user machine at any given time.

Primary License Charge ("PLC") is a one-time charge for the media and license keys for a specific V6 PLM Program, together with an irrevocable (subject to the terms of the Agreement concerning license and agreement termination), nonexclusive, and non-transferable right to use that Program.

System License - a license to use certain V6 PLM Programs for a specific database instance and/or as may be otherwise indicated by IBM. A minimum number of Named User Licenses of identified prerequisite V6 PLM Programs may be required in order to access a System License.

User - (a) a Customer employee or (b) an individual employee of Customer's consultant or subcontractor who accesses the V6 PLM Programs on Customer machines located on Customer premises to perform work for the internal needs of Customer.

Yearly License Charge ("YLC") is a recurring charge for (i) a nonexclusive and non-transferable right to use a V6 PLM Program, (ii) current and subsequent software releases of a specific V6 PLM Program that are or become generally available during the term of the YLC, and (iii) associated Support Services.

2. License

    a. V6 PLM Programs are licensed under a Named User, System, Concurrent, or Machine-based License, as specified at http://www.ibm.com/support/docview.wss?rs=886&context=SW860&uid=swg27012981 or in a Transaction Document.

    b. Customer may replace Named Users as necessary to reflect permanent personnel changes, provided that the number of individuals authorized to use the V6 PLM Program(s) does not exceed the maximum number of Named User authorizations Customer has licensed from IBM.

2.1 Annual License Charge ("ALC")/Recurring License Charge ("RLC")

For the first year of each license of each V6 PLM Program, Customer will pay the ALC/RLC together with the PLC. Support Services provided under the ALC/RLC are more fully described in section 3 Support Services below.

2.2 Use of Certain V6 PLM Programs by Extended Enterprise Users and by Remote Access

    a. The following terms apply to V6 PLM Programs specified at http://www.ibm.com/support/docview.wss?rs=886&context=SW860&uid=swg27012981 as permissible for use by Extended Enterprise Users:

    A Named User that is an Extended Enterprise User may access the applicable Designated Machine for the sole purpose of enabling the Extended Enterprise User to conduct business with Customer, provided that any such Extended Enterprise User be limited to use of the V6 PLM Programs (a) solely as configured and deployed by Customer and (b) solely in connection with its performance of services for and on behalf of Customer, and not for such Extended Enterprise User's own or another's account or for the purpose of hosting, modifying, or otherwise using or maintaining the V6 PLM Program(s). Customer agrees that Customer is responsible for ensuring that any Extended Enterprise User uses V6 PLM Programs in compliance with the terms of the Agreement, including the terms stated herein (Attachment). Customer further agrees that any breach by an Extended

Enterprise User of the terms of the Agreement, including those of this Attachment, will be deemed a breach by Customer.

b. The following terms apply to V6 PLM Programs specified at
http://www.ibm.com/support/docview.wss?rs=886&context=SW860&uid=swg27012981
as permissible for use by Remote Access:

Named Users or Extended Enterprise Users may access and use the licenses to these V6 PLM Programs remotely via the Internet from any country, and only with a specific Designated Machine, except inside the Customer Enterprise where a Named User may access more than one Designated Machine.

2.3 Use of Development Tool Kits in the Provision of Third Party Services and in the External Distribution of Complementary Applications

a. Customer is licensed to distribute Customer's applications developed with the Development Tool Kits ("V6 Complementary Applications") to Customer's subcontractors and to direct and indirect suppliers solely for performance of work by such subcontractors and suppliers for Customer's benefit. This license includes Customer's right to authorize Customer's subcontractors and direct and indirect suppliers to use, execute, reproduce, display, perform and distribute internally the V6 Complementary Applications.

b. This Attachment does not grant any right or license to Customer to use the Development Tool Kits in the provision of services to a third party. Customer must obtain agreement from Dassault Systemes S.A. to obtain such rights or licenses.

This Attachment does not grant any right or license to Customer to use the Development Tool Kits to make the V6 Complementary Applications generally available. In this context, "generally available" means the general release or other distribution of the V6 Complementary Applications as commercially available, directly or through other parties, for use by end user customers. Customer must obtain agreement from Dassault Systemes S.A. in order to do so.

2.4 Use of Other V6 PLM Programs for Third Party Services

Customer may use the V6 PLM Programs for added-value engineering and or implementation services. Added-value engineering or implementation services are services to (i) deliver to a third party end user any data, information or deliverable generated specifically for the third party from use by Customer of the V6 PLM Programs; or (ii) facilitate such specific third party's use of the V6 PLM Programs under the third party's end user license, but not for the purpose of developing software code for (1) general distribution by any means, and whether alone or bundled or delivered with any product, data, information, software, or other element, or (2) any services that do not add value attributable to human skills, such as, without limitation, in a data services operation or as an applications service provider. Further, Customer may not represent or imply to any party that it is an authorized or certified provider of services for IBM or Dassault Systemes SA.

2.5 Third Party Software

The provisions of this paragraph do not apply to the extent they are held to be invalid or unenforceable under the law that governs this license. Certain V6 PLM Programs may either contain third party software components or be third party software products to which certain

specific terms apply, and is considered "Separately Licensed Code." The specific third party software that is Separately Licensed Code may be found at http://www.ibm.com/support/docview.wss?rs=886&context=SW860&uid=swg27012982.

IBM Separately Licensed Code is licensed to Customer under the terms of the applicable third party license agreement(s) set forth in the Licensed Program Specifications or NON_IBM_LICENSE file(s) that accompanies the Program. Notwithstanding any of the terms in the Agreement, or any other agreement Customer may have with IBM, the terms of such third party license agreement(s) governs Customer's use of all Separately Licensed Code unless otherwise noted below. Customer agrees to be bound by and to comply with such terms.

If Customer does not agree to the terms of these third party license agreements, Customer may not use the Separately Licensed Code.

Note: Notwithstanding any of the terms in the third party license agreement, the Agreement, or any other agreement Customer may have with IBM:

   a. IBM provides this Separately Licensed Code to Customer **WITHOUT WARRANTIES OF ANY KIND;**

   b. **IBM DISCLAIMS ANY AND ALL EXPRESS AND IMPLIED WARRANTIES AND CONDITIONS INCLUDING, BUT NOT LIMITED TO, THE WARRANTY OF TITLE, NON-INFRINGEMENT OR INTERFERENCE AND THE IMPLIED WARRANTIES AND CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE SEPARATELY LICENSED CODE;**

   c. IBM is not liable to Customer, and will not defend, indemnify, or hold Customer harmless for any claims arising from or related to the Separately Licensed Code; and

   d. IBM is not liable for any direct, indirect, incidental, special, exemplary, punitive or consequential damages including, but not limited to, lost data, lost savings, and lost profits, with respect to the Separately Licensed Code.

2.6 Excluded Components

Notwithstanding the terms of any other agreement Customer may have with IBM or any of its related or affiliated companies (collectively "IBM") or with any of the third parties that provide IBM products ("Third Parties"), the following terms apply to all "Excluded Components" identified at http://www.ibm.com/support/docview.wss?rs=886&context=SW860&uid=swg27012982

   a. all Excluded Components are provided on an "AS IS" basis;

   b. **IBM AND THIRD PARTIES DISCLAIM ANY AND ALL EXPRESS AND IMPLIED WARRANTIES AND CONDITIONS INCLUDING, BUT NOT LIMITED TO, THE WARRANTY OF NON-INFRINGEMENT OR INTERFERENCE AND THE IMPLIED WARRANTIES AND CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE;**

   c. IBM and Third Parties will not be liable to Customer or indemnify Customer for any claims related to the Excluded Components; and

   d. IBM and Third Parties will not be liable for any direct, indirect, incidental, special exemplary, punitive or consequential damages with respect to the Excluded Components:

Notices and important information that IBM is required to provide to Customer with respect to the Excluded Components, may be found in the Licensed Program Specifications that accompanies the Program.

Customer's use of the Excluded Components is governed by the terms of the Agreement and not by any terms that may be contained in a NOTICES file(s). The terms contained in the Agreement are offered by IBM and not by any other party.

3. Support Services

In consideration for payment of ALC or RLC for each V6 PLM Program license, IBM also provides the following "Support Services" to Customer:

    a. Program Services; and

    b. assistance with program-specific, task-oriented questions about the installation, usage and operation of the products

For more information about services provided, see

http://www-1.ibm.com/support/docview.wss?rs=886&context=SW860&uid=swg27013006.

At any time after the first year of commencement of ALC/RLC charges, Customer may terminate subsequent ALC/RLC for a V6 PLM Program on one month's written notice to IBM. If Customer terminates ALC/RLC on a V6 PLM Program license, the ALC/RLC termination will apply to all licenses of that V6 PLM Program. Customer will no longer (i) be entitled to Support Services and (ii) have any right to new releases, for any of the licenses of that V6 PLM Program.

In addition, Customer must take steps necessary to avoid using any fixes or releases to which Customer is not entitled as a result of Customer's termination of ALC/RLC.

Customer may reinstate ALC/RLC, provided such reinstatement is activated for all licenses of a V6 PLM Program held by Customer, and Customer pays a reinstatement charge for the period from the date of termination of Support Services to the date of reinstatement of such ALC/RLC.

4. Warranty

Notwithstanding other terms of the Agreement, the warranty period for a V6 PLM Program ends when the Support Services for the V6 PLM Program are no longer available or Customer terminates ALC/RLC, whichever occurs first. If Customer reinstates ALC/RLC and V6 PLM Support Services are still available, the warranty period will also be reinstated.

Neither party is relying on any representation that is not specified in this Attachment (or the documents specified in the preceding sentence), including without limitation any representations concerning: 1) performance or function of any Product or system, other than as documented in its Specifications; 2) the experiences or recommendations of other parties; or 3) results or savings Customer may achieve.

5.15 IBM PROGRAM LICENSE AGREEMENT (IPLA)

LICENSED DETAILS FOR "OTHER IBM PROGRAMS" (i.e., OTC SOFTWARE, DISTRIBUTED SOFTWARE)

The license details below are for certain products within IBM's Schedule designated with a "P" in the License Type category of the software pricelist or the Licenses within the Passport Advantage pricelist. By downloading, installing, copying, accessing, or using the Program, the Government (Licensee) agrees to the terms stated herein. If the Government does not agree to these terms:

- Do not download, install, copy, access, click on an "accept" button, or use the Program; and
- Promptly return the unused media, documentation, and Proof of Entitlement to the party from who it was obtained for a refund of the amount paid. If the Program was downloaded, destroy all copies of the Program.

Documentation entitled "License Information" will be enclosed with the Program and contains additional information and terms and conditions concerning the Program and any related Program Services. The Program's LI is available at http://www.ibm.com/software/sla/.

Definitions

"Authorized Use" – the specified level at which the Government is authorized to execute or run the Program. That level may be measured by number of users, millions of service units ("MSUs"), Processor Value Units ("PVUs"), or other level of use specified by IBM.

"IBM" - International Business Machines Corporation or one of its subsidiaries.

"License Information" ("LI") – a document that provides information and any additional terms specific to a Program. The Program's LI is available at http://www.ibm.com/software/sla. The LI can also be found in the Program's directory, by the use of a system command, or as a booklet included with the Program.

"Program" – the following, including the original and all whole or partial copies; 1) machine-readable instructions and data, 2) components, files, and modules, 3) audio-visual content (such as images, text, recordings, or pictures), and 4) related licensed materials (such as keys, and documentation).

"Proof of Entitlement" – evidence of the Licensee's Authorized Use. The PoE is also evidence of Licensee's eligibility for warranty, future update prices, if any, and potential special or promotional opportunities. IBM does not provide the Licensee with a PoE, then IBM may accept as the PoE the original paid sales receipt or other sales record from the party (either IBM or its reseller) from whom the Program was obtained, provided that it specifies the Program name and Authorized Use obtained.

"Warranty Period" – one year, starting on the date the original Licensee is granted the license.

Agreement Structure

The IPLA consists of the terms and conditions as stated herein, the General terms of Chapter 1 of this Contract, the LI, and the PoE and is the complete agreement between the Government and IBM regarding the use of the Program. It replaces any prior oral or written communication

between the Government and IBM concerning the Government's use of the Program. The terms of the LI may replace or modify sections of this IPLA.

Acceptance

The Government's acceptance of a Program is the earlier of the second business day after the Program's standard transit allowance period, or receipt of the Program, when IBM provides the Government authorization to download the product via the Proof of Entitlement.

Not withstanding anything herein to the contrary, the parties agree as follows:

(i) the ordering activity may negotiate an extension regarding the time of acceptance before issuing a delivery order; and (ii) the parties may mutually agree on the acceptance period for overseas orders.

5.15.1 LICENSE GRANT

The Program is owned by IBM or an IBM supplier, and is copyrighted and licensed, not sold.

Use of the Program:
IBM grants to the Government a nonexclusive license to:

1) Use the Program up to the Authorized Use specified in the PoE and

2) Make and install copies to support such Authorized Use specified in the PoE, and

3) Make a backup copy, all provided that:

   a. The Government has lawfully obtained the Program and complies with the terms as stated herein.

   b. the backup copy does not execute unless the backed-up Program cannot execute;

   c. the Government reproduces all copyright notices and other legends of ownership on each copy, or partial copy of the Program.

   d. The Government ensures that anyone who uses the Program (accessed either locally or remotely) does so only on the Government's behalf and complies with the terms stated herein.

   e. The Government does not 1) use, copy, modify, or distribute the Program except as expressly permitted in this IPLA Agreement; 2) reverse assemble, reverse compile, or otherwise translate, or reverse engineer the Program except as expressly permitted by law without the possibility of contractual waiver, 3) use any of the Program's components, files, modules, audio-visual content, or related licensed materials separately from that Program; or 4) sublicense, rent, or lease the Program and

   f. if Licensee obtains this Program as a Supporting Program, Licensee uses this Program only to support the Principal Program and subject to any limitations in the license to the Principal Program, or if Licensee obtains this Program as Principal Program, Licensee uses all Supporting Programs only to support this Program, and subject to any limitations in this IPLA Agreement. For purposes of this Item f. a "Supporting Program" is a Program that is part of another IBM Program ("Principal Program") and identified as a

Supporting Program in the Principal Program's LI. (To obtain a separate license to a Supporting Program without these restrictions, the Government should contact IBM or the party from whom the Government obtained the Supporting Program.)

This license applies to each copy of the Program that the Government makes.

Transfer of Rights and Obligations:

The Government may transfer a Program and all the Government's license rights and obligations to another party only if that party agrees to the terms of the IPLA. If the license is terminated for any reason by either party, the Government is prohibited from transferring the Program to another party.   When the Government transfers the Program, it must also transfer a copy of the IPLA terms and conditions including the LI, and the Proof of Entitlement for the Program. The transfer of the license rights and obligations terminates the current Government user's authorization to use the Program under the Proof of Entitlement. The Government may not transfer a portion of 1) the Program or 2) the Program's Authorized Use.

5.15.2 TRADE-UPS, UPDATES, FIXES, AND PATCHES

5.15.2.a Trade-ups

It the Program is replaced by a trade-up Program, the replaced Program's license is promptly terminated.

5.15.2.b Updates, Fixes, and Patches

When the Government receives an update, fix, or patch to a Program, the Government accepts any additional or different terms that are applicable to such update, fix, or patch that are specified in its LI. If no additional or different terms are provided, then the update, fix, or patch is subject solely to the terms stated herein for the IPLA Agreement. If the Program is replaced by an update, the Government agrees to promptly discontinue use of the replaced Program.

5.15.3 FIXED TERMS LICENSES

If IBM licenses the Program for a fixed term, the Government's license is terminated at the end of the fixed term unless the Government provides a funded delivery order to renew it.

5.15.4 MONEY-BACK GUARANTEE

If the Government is dissatisfied with the Program for any reason and is the original Licensee, the Government may terminate the license and obtain a refund of the amount the Government paid for the Program, provided the Government returns the Program and PoE to IBM or the party from who the Government obtained it within 30 days of the date the PoE was issued to the Government. If the license is for a fixed term that is subject to renewal, then the Government may obtain a refund only if the Program and its PoE are returned within the first 30 days of the initial term. If the Government downloaded the Program, the Government should contact IBM or the party from who the Program was acquired, for instructions on how to obtain the refund.

5.15.5 WARRANTY

IBM warrants that the Program when used in its specified operating environment will conform to its specifications. The Program's specifications, and specified operating environment information, can be found in documentation accompanying the Program (such as a read-me file) or other information published by IBM (such as an announcement letter).

The warranty applies only to the unmodified portion of the Program. IBM does not warrant uninterrupted or error-free operation of the Program or that IBM will correct all Program defects. The Government is responsible for the results obtained from the use of the Program.

During the Warranty Period IBM provides the Government with access to IBM databases containing information on known Program defects, defect corrections, restrictions, and bypasses at no additional charge. Consult the IBM Software Support Handbook for further information at http://www.ibm.com/software/support.

If the Program does not function as warranted during the Warranty Period and the problem cannot be resolved with information available in the IBM databases, the Government may return the Program and its POE to IBM, or the party from who the Government obtained the Program, and receive a refund of the amount the Government paid. After returning the Program, the Government's license terminates. If the Government downloaded the Program, the Government should contact IBM, or the party from whom the Program was obtained, for instructions on how to obtain the refund.

Exclusions

THESE WARRANTIES ARE THE GOVERNMENT'S EXCLUSIVE WARRANTIES AND REPLACE ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, FITNESS FOR A PARTICULAR PURPOSE, AND TITLE.

THE WARRANTIES IN THIS SECTION ARE PROVIDED SOLELY BY IBM. THE DISCLAIMERS ABOVE, HOWEVER, ALSO APPLY TO IBM'S SUPPLIERS OF THIRD PARTY CODE. THOSE SUPPLIERS PROVIDE SUCH CODE WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND. THIS PARAGRAPH DOES NOT NULLIFY IBM'S WARRANTY OBLIGATIONS UNDER THIS IPLA AGREEMENT.

5.15.6 LICENSEE DATA AND DATABASES

To assist the Government in isolating the cause of a problem with the Program, IBM may request that the Government 1) allow IBM to remotely access the Government's system or 2) send the Government's information or system data to IBM. However, IBM is not obligated to provide such assistance unless, IBM and the Government enter a separate written agreement under which IBM agrees to provide to the Government that type of technical support which is beyond IBM's warranty obligations in this IPLA Agreement. In any event, IBM uses information about errors and problems to improve its products and services, and assist with its provision of related support offerings. For these purposes, IBM may use IBM entities and subcontractors (including in one

or more countries other than the one in which Licensee is located), and Licensee authorizes IBM to do so.

The Government remains responsible for 1) any data and the content of any database the Government makes available to IBM, 2) the selection and implementation of procedures and controls regarding access, security, encryption, use, and transmission of data (including any personally-identifiable data), and 3) backup and recovery of any database and any stored data. The Government will not send or provide IBM access to any personally-identifiable information, whether in data or any other form.

5.15.7 COMPLIANCE VERIFICATION

See Compliance Verification terms under 5.11 of this Chapter. For the purposes of the IPLA Agreement the License terms means 1) the terms of this IPLA Agreement and applicable amendments and transaction documents provided by IBM, and 2) IBM software policies that may be found at the IBM Software Policy website (**www.ibm.com/sofwarepolicies/**), including but not limited to those polices concerning backup, sub-capacity pricing, and migration.

Resolution – IBM will notify the Government in writing if any such verification indicates that the Government has used any program in excess of its Authorized Use or is otherwise not in compliance with the IPLA Program Terms. The Government agrees to pay IBM for charges associated with 1) any such excess use, 2) support for such excess use for the lesser of the duration of such excess use or two years, and 3) any additional charges as a result of such non-compliance.

5.15.8 THIRD PARTY NOTICES

The Program may include third party code that IBM, not the third party, licenses to the Government under this IPLA Agreement. Notices, if any, for the third party code ("Third Party Notices") are included for the Government's information only. These notices can be found in the Program's NOTICES file(s). Information on how to obtain source code for certain third party code can be found in the Third Party Notices. If in the Third Party Notices IBM identifies third party code as "Modifiable Third Party Code", IBM authorizes the government to 1) modify the Modifiable Third Party Code and 2) reverse engineer the Program modules that directly interface with the Modifiable Third Party Code provided that it is only for the purpose of debugging the Government's modifications to such third party code. IBM's service and support obligations, if any, apply only to the unmodified Program.

5.15.9 CHARGES

The amount payable for a Program license is a one-time charge. Charges are based on Authorized Use obtained which is specified in the POE. If the Government wishes to increase its Authorized Use, the Government must notify IBM and pay any applicable charges. IBM does not give refunds or credits for charges already due or paid.

For Programs delivered electronically in the United States for which the Licensee claims a state sales and use tax exemption, Licensee agrees not to receive any tangible personal property (e.g., media and publications) associated with the electronic program.

The Government agrees to be responsible for any sales and use tax liabilities that may arise as a result of Government's subsequent redistribution of Programs after delivery by IBM. If a customs duty, tax, levy or fee for the import into or the export, transfer, access, or use of the Program outside the country in which the Government was originally granted the license, then the Government agrees that it is responsible for, and will pay, any amount imposed.

5.15.10 TERMINATION

IBM may terminate the Government's license if it is determined the Government failed to comply with the terms stated herein. If either party terminates the license, the Government must destroy all copies of the Program. Any terms of this IPLA that by their nature extend beyond the termination of the Program remain in effect until fulfilled and apply to both party's respective successors and assignees.

5.15.11 GENERAL

Neither party is relying on any representation not specified in this IPLA Agreement, including but not limited to any representation concerning: 1) the performance or function of the Program, other than as expressly warranted in the Warranty section above; 2) the experiences or recommendations of other parties; or 3) any results or savings that the Government may achieve.

5.15.12 ACQUISITION OF SOFTWARE MAINTENANCE

The terms and conditions govern the acquisition of Software Maintenance (SWM), which may also be referred to as Software Subscription and Support (S&S). Software Maintenance is available for when purchasing IPLA Software licenses outside of Passport Advantage. IBM will provide software maintenance support, as described below, for those Eligible Programs for which you are licensed and for which you order this Service.

For new license purchases, Software Maintenance is one year, or the period IBM specifies in the Proof of Entitlement which accompanies new license purchases, or other document that IBM provides to the Government, beginning on the date of acquisition and ending on the same day of the corresponding month of the following year.

5.15.12.1 IBM'S SOFTWARE MAINTENANCE INCLUDES:

The Government agrees to:

1. To acquire Software Maintenance at the same authorized level of use as the Program for which you are acquiring it, as well as all copies of the Program at the same location. This

includes Programs that the Government already acquired and those that you may acquire subsequently.

2. To be responsible for the results obtained from the use of the Software Maintenance;

3. To remain responsible for adequately protecting your system and all data contained in it whenever IBM remotely accesses it with your permission to assist you in isolating the software problem cause;

4. To provide sufficient, free, and safe access to the Government's facility for the fulfillment of IBM's obligations.

5. To have specified equipment or programs installed at your location if Software Maintenance is provided through a telecommunications link, and

6. Not to assign, or otherwise transfer, this Agreement or the Government's rights stated herein, or delegate its obligations, without prior written consent. Any attempt to do so is void.

Software Maintenance Transferability:

The Government may transfer their Software Maintenance only to a location that is within its agency or department provided that 1) the applicable Program is transferable and is transferred in accordance with its license terms and 2) the entity receiving the Program agrees to the terms herein. Transferring between military departments requires prior written consent from IBM.

Termination:

The Government may terminate the Support by providing IBM one month written notice. Such notice should be provided to IBM for termination at the end of the Government's fiscal year/anniversary date for the renewal, but failure to give notice shall not be deemed as obligating the succeeding fiscal year's funds. If not terminated, a delivery order must be issued effective the first day of the succeeding fiscal year or contract year to ensure there is no lapse in time subjecting the Government to a Software Maintenance After License Charge.

Withdrawal:

IBM may withdraw Software Maintenance for a Program by publishing a notification of withdrawal at www.ibm.com/software/supportlifecycle not less than 12 months prior to its effective date. If IBM withdraws Software Maintenance for which the Government has provided payment and IBM has not yet fully provided Software Maintenance to you, IBM will either continue to provide Software Maintenance until the end of the current Support Period or give you a prorated refund.

Warranty:

IBM warrants that Software Maintenance will be provided using reasonable care and skill and according to its current description.

The warranties will be voided by misuse, accident, modification, unsuitable physical or operating environment, operation in other than the specified operating environment, or failure caused by a product for which we are not responsible.

THESE WARRANTIES ARE YOUR EXCLUSIVE WARRANTIES AND REPLACE ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR

CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

IBM does not warrant uninterrupted or error-free provision of Software Maintenance.

Charges: One-Time-Charge with options to renew on the yearly anniversary date. Support Charges may vary, depending on, for example, the machine (type/model), the Program selected, or group of Programs. If the Government returns a Program for a refund as allowed under its license terms, IBM will terminate, and refund any charges paid for Software Maintenance ordered with the Program.

Programs running on IBM distributed platforms (e.g., IBM Power Systems), IBM System i, IBM System p, or IBM System x or equivalent.

IBM will provide software maintenance support, as described below, for those Eligible Programs for which you are licensed and for which you order this Service.

General:

1. IBM makes available to you the most current commercially available version, release or update to all of the Eligible Programs for which you acquire Software Subscription and Support, should any be made available. The Government's right to upgrade to a new version, release or update may be exercised during the Software Maintenance Period and expires at the end of the Period if Software Maintenance is not renewed. Information on ordering versions, releases, or updates can be found at http://www-05.ibm.com/servers/eserver/ess/OpenServlet.wss and selection the Entitled Software Update ("EUS") screen tab.

2. IBM provides you with assistance for your a) routine, short duration installation and usage (how-to) questions and b) code defect related questions.

3. IBM provides assistance via telephone and, if available, electronic access, only to your information systems (IS) technical support personnel during normal business hours (normal business hours are 8 a.m. to 5 p.m. in the local time zone where you receive this Service, Monday through Friday, excluding national holidays). This assistance is not available to your end users. IBM provides Severity 1 assistance 24 hours a day, every day of the year. Consult the IBM Software Support Guide, which may be found at www.14.software.ibm.com/webapp/set2/sas/f/handbook/home.html for details. A 24x7 (every day of the year) all severity option is available at extra charge. During normal business hours, IBM's response time objective is two hours for voice and electronic problem submissions. For voice problem submissions during other than normal business hours, IBM's response time objective for critical problems (Severity 1) is two hours and if you select the 24x7 all severity option, four hours for non-critical problems. For electronic problem submissions during other than normal business hours, IBM's response time objective is within two hours of the start of normal business hours on the next business day. IBM's initial response (either voice or electronic) may result in resolution of your problem or it will form the basis for determining what additional actions may be required to achieve technical resolution of your problem. IBM is not responsible for delays in electronic response delivery caused by systems and network problems.

4. In some instances, IBM may request that you allow it to remotely access your system to assist you in isolating the software problem cause. You will remain responsible for adequately protecting your system and all data contained therein whenever we remotely access it with your permission.

5. This Service does not include assistance for a) the design and development of applications, b) your use of Programs in other than their specified operating environment, or c) failures caused by products for which IBM is not responsible under this Service.

6. The initial Support Period begins on the date that IBM makes the Program available to you. If the Program is part of an iSeries grouped offering, then the Initial Support Period duration will be adjusted so that the expiration coincides with that of the other Programs in the group. In such event, the Initial Support Period may be less than one year.

7. This Service is provided by United States personnel solely for servers that are located within the United States. For calls that originate from outside of the United States: 1) toll free telephone access is not available, 2) "8:00 a.m. to 5:00 p.m. in the local time zone" is defined as the time zone where your designated Point of Contact resides, Monday through Friday (excluding national holidays), 3) replies or other return communication to the caller will be via electronic means only, 4) software "traps" or other tools that may be necessary to diagnose problems will be sent only to the United States server location, and 5) the diagnosis and repair of data encryption will be discussed only with personnel at the United States server location.

Eligible Programs: Licensed programs for which this Service is available are listed at http://www.ibm.com/services/sl/swm/ or may be obtained from your IBM marketing representative.   The listing of Eligible Programs contains the last date of service for each respective release of licensed programs. IBM will support only current releases. It is your responsibility to insure that, when calling in for service, your software is current.

Software Maintenance After License Fee: The Software Maintenance After License fee is a one time charge to resume Software Maintenance if you a) did not renew this Service prior to the end of the then current support period or b) terminated this Service. The new support period in such an instance begins on the date that IBM accepts your order.

Software Maintenance for Programs running in the System z environment or equivalent:

1. Eligible Programs: Licensed Programs for which Support and Subscription is available are listed at www-1.ibm.com/servers/eserver/zseries/library/swpriceinfo/. Click on Exhibits: Subscription and Support.

2. Support Period: One year. When you order Support and Subscription (S&S) with a Program, the initial Support Period begins on the date that IBM makes the Program available to you. If you terminate S&S, IBM does not issue credit for the unused portion of a Support Period. Subsequent Support Periods begin on the day following the end of the preceding Support Period.

3. Anniversary Adjustment: When you acquire S&S initially or resume it, or prior to the end of the then current Support Period for renewals, you may request that the Support Period duration be adjusted to end at a month of your choice. If you do not choose a date, IBM will inform you of the end date. The Support Charge will be pro-rated accordingly.

4. Support and Subscription: For the unmodified portion of a Program, and to the extent problems can be recreated in the Specified Operating Environment, includes:

   a. Code Corrections: code to correct reported, substantial deviations from the Program's then applicable Specifications;

   b. Fixes: existing Code Corrections, restrictions or known bypasses for reported problems;

   c. Program Updates: periodic releases of collections of Code Corrections, Fixes, functional enhancements (including modifications to accommodate applicable statutory or regulatory changes) and new versions and releases to the Program and documentation.

   d. Technical Assistance: a reasonable amount of remote assistance via telephone, mail, facsimile (fax) or e-mail to address suspected Program defects. Technical assistance is available from the IBM support center. Additional details regarding Technical Assistance, including IBM contact information, are provided in the Software Support Handbook at www14.software.ibm.com/webapp/sas/f/handbook/home.html

   e. S&S does not include assistance for 1) design and development of applications, 2) Customer's use of Programs in other than their specified operating environment, or 3) failures caused by products for which IBM is not responsible for under these terms.

   f. Resumption Fee: Equal to the total of all Support charges that you would have paid during the lapse interval (i) had you not declined S&S at the time you acquired the license for a Program and now wish to acquire S&S or (ii) if you wish to resume S&S that you had previously terminated. A Support Period in such an instance begins on the date that IBM accepts your order.

   g. Support Upgrade: If you upgrade S&S due to an increase in the level of use of a license, any increase to the Support Charge will be pro-rated to the next anniversary.

Renewal: IBM will renew expiring software maintenance provided a funded delivery order is received by the end of the Support Period. Subsequent Support Periods begin on the day following the end of the preceding Support Period.

5.15.13 PASSPORT ADVANTAGE

IBM Passport Advantage terms and conditions for Software and Subscription Support are located in Appendix S.

5.15.14 IBM SOFTWARE SECURE SUPPORT VIA U.S. CITIZENS

1. Service Description

IBM's Software Secure Support via U.S. Citizens covers IPLA software sold via Passport Advantage, and AIX Operating System programs Software Maintenance support. This offer complements the Government's prerequisite IBM base software support service by providing standard IBM software support exclusively by U.S. citizens who are located in the United States.

Your data analysis and call data will be contained in an isolated network within a facility that meets U.S. Government security specifications.

2. Passport Advantage Software Secure Support via US Citizen Terms

IBM Secure Support begins on the date of acquisition and ends on the last day of the corresponding month in the following year, unless the date of acquisition is the first

day of the month, in which case coverage ends on the last day of the month, 12 months from the date of acquisition.

IBM Software Subscription and Support must stay in effect for the IBM Secure Support to be active. While IBM Secure Support is in effect:

- IBM provides U.S. Citizen support via telephone, only to your information systems (IS) technical support personnel during the hours of 8 AM Eastern to 8 PM Eastern, Monday through Friday, but excluding U.S., location, IBM and public holidays. A Service Request will be created and placed in an incoming queue which is managed and handled by a U.S. citizen.

- Service Requests that are submitted electronically through the web will not be secure and IBM cannot guarantee that a U.S. citizen will handle your electronic request. No sensitive data should be sent by the Customer via this electronic service request tool.

- 24x7 software support for business critical outages is available through a customer's standard support entitlement. Secure Support is only guaranteed during the hours of 8 AM to 8 PM Eastern, Monday through Friday, excluding U.S., location, IBM and public holidays.

- If the Secure Support Facility is unable to take a call, the customer has the option of having their call handled by Passport Advantage (non-secure) support until the facility is back online.

- IBM provides you assistance for your 1) routine, short duration installation and usage (how-to) questions; and 2) code-related questions ("Support"). Secure Support for a particular version or release of a Program is available only until IBM withdraws Secure Support for that Program's version or release. The IBM "Software Support Lifecycle" policy is available at http://www-306.ibm.com/software/lotus/support/lifecycle/. When such Secure Support is withdrawn, you must upgrade to a supported version or release in order to continue to receive such support.

- During the support handling process, IBM U.S. citizen support staff may seek assistance from non-U.S. citizens in IBM development, however, customer data will not be released outside of the Secure Support Facility.

- The Duty Manager will be a U.S. citizen who can assist in addressing an escalation that can not be handled by the support staff.

- IBM will verify your Subscription and Support entitlement using its standard processes, such verification does not fall under this Secure Support services.

2.1 Charges

IBM will charge the following uplift to the Passport Advantage product price or Passport Advantage software subscription and support price for this Software Secure Support service:

License & SW Subscription & Subscription Support	2.2%
Annual SW Subscription and Support renewal	11.0%
Annual SW Subscription and Support Reinstatement	11.0%
Trade Up License and SW Subscription and Support	2.2%

By providing IBM with a funded delivery order, the Customer agrees to purchase IBM's Software Secure Support via U.S. Citizens for all current and future licenses for the contract period for the Customer's "Site" as defined by the Passport Advantage terms elsewhere in this Chapter.

Without limiting any other rights or remedies that may be available to IBM, IBM may suspend work in the event payment of any invoice is not paid within thirty (30) days from the Customer's receipt of the invoice.

2.2. Withdrawal of IBM Secure Support via U.S. Citizens

If IBM withdraws IBM Secure Support via U.S. Citizens, you understand that:

a. IBM will provide a minimum of 12 months notice for such a withdrawal;

b. IBM will not renew the next annual IBM Software Secure Support term; and

c. If you renewed IBM Software Secure Support via U.S. Citizens prior to the notice of withdrawal, IBM, at its sole discretion, will either continue to provide secured support to you for Software Product licenses until the end of the then current coverage period or you may obtain a prorated refund.

IBM requires the following Primary Contact information be provided:

Name: _____

Title: _____

Division: _____

Phone: _____

Address: _____

E-mail address: _____

3. Secure Support via USA Citizens Terms for Software Maintenance for AIX Operating System One Time Charge Software

In addition to IBM Software Maintenance for AIX operating system terms, under the section in this Chapter titled "Acquisition of Software Maintenance", the Government may purchase IBM's Secure Support via USA Citizens feature, which provides standard IBM software support managed exclusively by USA Citizen who are located in the continental United States. Secure Support via USA Citizens is available via voice support only. Each time you call IBM, this feature will be turned on only after you identify yourself as a Secure Support via USA Citizens

customer and IBM verifies your entitlement for this feature. When required by you, your data analysis and call data will be contained in an isolated network and supported by USA Citizens only.

Pricing for this offer may be found under the Software Maintenance pricelist.

5.16 SOFTWARE PRICING OPTIONS

Note: These pricing options generally apply to "ICA" Programs.

5.16.1 IBM SYSTEM Z ADVANCED WORKLOAD LICENSE CHARGES

Any Programs subject to the terms outlined herein that require z/Architecture (64-bit) hardware in order to execute properly may be licensed only to a Designated Machine that properly implements z/Architecture.

1. Definitions

AWLC - Advanced Workload License Charges available for selected IBM Programs which are used on an Eligible Machine and are running under an Eligible Operating System. AWLC charges allow for Sub-Capacity Pricing.

Eligible Machine - A Machine to which an Eligible Operating System is licensed. Eligible Machines are specified in the IBM System z Advanced Workload License Charges Appendix Q, or later version of IBM's Commercial Exhibit (Z125-8538-00).

Eligible Operating System - An operating system specified in the Exhibit which runs in z/Architecture (64-bit) mode on an Eligible Machine.

Full Capacity MSUs - The total capacity of a Machine as specified in the Exhibit.

Guest (LPAR) - z/TPF or z/OS when running under z/VM.

MSUs - Millions of Service Units per hour; the measure of workload capacity of an Eligible Machine.

Native (LPAR) - z/TPF or z/OS when not running under z/VM.

Operating System Family - An IBM operating system and the IBM middleware that runs under it. The applicable IBM operating systems are z/OS, z/TPF, and z/VSE V4 or higher.

Product LPAR Utilization Capacity - The highest number of MSUs utilized by the combined logical partitions ("LPARs") in which an AWLC IBM Program runs concurrently during a Reporting Period. The number of MSUs is based on a four-hour rolling average utilization.

Product Utilization Capacity - The highest number of MSUs utilized concurrently by all copies of an IBM Program running on the same Eligible Machine during a Reporting Period. The number of MSUs is based on a four-hour rolling average program utilization.

PSLC - Parallel Sysplex License Charges are available for selected IBM Programs that are used on an Eligible Machine and are running under an Eligible Operating System. See Appendix L or later version of IBM's Commercial Exhibit – Parallel Sysplex License Charges (Z125-5205-04 or later) for applicable terms.

Reporting Period - The period that begins on the second day of a month and ends on the first day of the following month.

Sub-Capacity Pricing – Charges for AWLC IBM Programs based on less than Full Capacity MSUs.

SCRT – The latest version of the IBM Sub-Capacity Reporting Tool made available by IBM. The SCRT analyzes System Management Facilities ("SMF") data, SCRT89 data, and other data and calculates the Product LPAR Utilization Capacity for AWLC IBM Programs.

Sub-Capacity Report - A report generated by the SCRT to enable IBM to calculate Sub-Capacity Pricing for AWLC Programs. The Government is required to submit the report to IBM only if Sub-Capacity Pricing is in effect.

VWLC - Variable Workload License Charges are available for selected IBM Programs. VWLC charges allow for Sub-Capacity Pricing. See the terms within this Chapter 5 titled, "IBM System z Workload License Charges".

2. Charges

a. The Government has a choice of selecting either, if available, but not both, AWLC or PSLC for all IBM Programs within an Operating System Family on an Eligible Machine. But:

1. if the Government selects AWLC for z/OS on an Eligible Machine, Flat Workload License Charges ("FWLC") apply to all IBM Programs that are announced with FWLC charges:

(a) FWLC charges are fixed monthly charges.

(b) FWLC charges are not available on an Eligible Machine unless selects AWLC or VWLC for z/OS on that Eligible Machine;

2. once the Government selects AWLC, the Government may not switch back to PSLC without prior IBM approval, which IBM may grant in its sole discretion;

3. AWLC Programs may not be aggregated for pricing purposes with either PSLC Programs or VWLC Programs; and

4. IBM Programs with charge types specified below, however, may be licensed to the same Eligible Machine as IBM Programs with AWLC charges:

(a) System z New Application License Charges ("zNALC"), which are described in the terms within this Chapter titled "zNALC License Charges on IBM System z."

(b) New Application License Charges ("NALC"), which are described in the terms within this Chapter titled "System z New Application License Charge ."

(c) Select Application License Charges ("SALC"), which are described in the terms within this Chapter titled "Select Application License Charges for IBM System z Usage Pricing Charges ."

(d) Midrange Workload License Charges ("MWLC"), which are described in the terms within this Chapter titled "IBM System z Midrange Workload License Charges".

b. When AWLC charges apply to IBM Programs:

1. monthly charges are based on the number of MSUs reported for the IBM Program on the Sub-Capacity Report for the specified Eligible Machine during a Reporting Period. This value corresponds to the Product LPAR Utilization Capacity. If Sub-Capacity Pricing is not in effect, or the Government does not comply with the terms of this Attachment, monthly charges are based on Full Capacity MSUs.

NOTE: Information on IBM's billing process, including how to determine the applicable Reporting Period for a particular month's charges, can be found on the Sub-Capacity Corner Web site at http://ibm.com/systems/z/swprice/subcap/terms.html;

2. Eligible Operating System licenses are charged at Full Capacity MSUs until IBM has processed the initial Sub-Capacity Report for that Eligible Operating System on that Eligible Machine, thereby initiating Sub-Capacity Pricing for that Operating System Family;

3. the initial monthly charge for a non-operating system license is based upon the applicable MSUs for the Eligible Operating System for that Operating System Family;

4. once Sub-Capacity Pricing has begun for an Eligible Operating System on an Eligible Machine, if an AWLC IBM Program does not appear in a Sub-Capacity Report subsequent to its initial monthly charge, it will be charged at the minimum AWLC MSUs;

NOTE: IBM specifies minimum AWLC MSUs in its programming announcements;

5. if the Government elects to have Sub-Capacity Pricing for an AWLC IBM Program on an Eligible Machine, then the Government must have Sub-Capacity Pricing for all AWLC IBM Programs in that Operating System Family on that Eligible Machine;

6. AWLC Program features have the same MSUs as the Program;

7. increases in any AWLC charges that are due to changes the Government makes in the MSU capacity of any Eligible Machine to which the AWLC IBM Program is licensed will be in effect for a minimum period of one month;

8. if an OS/390 or MVS operating system is licensed to the same Eligible Machine, then charges for the z/OS Operating System Family are based on Full Capacity MSUs; and

9. when z/TPF is licensed to an Eligible Machine, the SCRT calculates the number of MSUs for z/TPF IBM Programs running on it. See Appendix P for Calculation of z/TPF MSUs for further details.

c. When aggregated AWLC charges apply to IBM Programs, aggregated charges:

1. are available only for IBM Programs used on an Eligible Machine in an actively coupled Parallel Sysplex. To be actively coupled, the following criteria must be met:

(a) All Eligible Machines in the Parallel Sysplex must be physically attached via coupling links to a common Coupling Facility. In addition, the Government must provide time synchronization using either timer links to a common Sysplex Timer or coupling links transporting Server Time Protocol ("STP") timing information in an STP Coordinated Timing Network("CTN").

If a Coupling Facility is divided into LPARs, all Eligible Machines must be attached to the same Coupling Facility LPAR.

(b) All Eligible Operating System images that comprise the Parallel Sysplex environment must have at least one common Systems Enablement Function, specified in the Exhibit, activated to use the Coupling Facility across all images in the Parallel Sysplex.

(c) The configuration and operating modes described in this Attachment must be the normal mode of operations for this environment.

(d) An Eligible Machine can only be in one Parallel Sysplex for pricing purposes. The Eligible Operating System images participating in the Systems Enablement Function(s) must account for at least 50 percent of the total Eligible Operating System workload on each Eligible Machine. In the event there are two LPARs, each 50 percent of the total Eligible Operating System workload, connected to two Parallel Sysplexes, The Government may select which Parallel Sysplex the Eligible Machine will be included in for billing.

2. require the Government to provide IBM with a completed IBM Sysplex Verification Package upon the occurrence of any of the following: 1) the Government implements an actively coupled Parallel Sysplex, 2) a change is made to any Eligible Machine, e.g., model upgrades or model downgrade in the Parallel Sysplex, 3) IBM requests a package for any year during which the Government has received aggregated AWLC pricing, and 4) at least once in every 12 month period.

NOTE: The IBM Sysplex Verification Package can be found at
http://ibm.com/systems/z/swprice/sysplex/verify.html.

Information regarding the technical aspects of Parallel Sysplex aggregation and detailed information on tools, processes and procedures may be found at the Sysplex Aggregation Web site at http://ibm.com/systems/z/swprice/sysplex.

3. are based on the sum of the MSUs on the Sub-Capacity Reports that the Government submits to IBM for each copy of an IBM Program installed on qualifying Eligible Machines in a Parallel Sysplex;

4. are based on Full Capacity MSUs if Sub-Capacity Pricing is not in effect; and

5. require two or more Eligible Machines actively coupled using the applicable coupling links and Coupling Facility specified in the Exhibit.

d. Transition Charges for Sysplexes:

1. Transition Charges for Sysplexes provide for a reduction in monthly VWLC charges for Programs that qualify for aggregated VWLC charges per the terms in this Chapter titled "System z Workload License Charges".

2. Transition Charges for Sysplexes apply when at least one Machine but not all Machines in an actively coupled Parallel Sysplex is an AWLC Eligible Machine. Transition charging terminates when all Machines in the Parallel Sysplex are Eligible Machines.

3. The reduction in monthly VWLC charges is based on the percentage of the total Full Capacity MSUs of all Machines in an actively coupled Parallel Sysplex that are associated with a Machine eligible for AWLC charges. (See table below). The result of the calculation will be rounded to the nearest whole percent. Fractions of a percent of 0.5 or more are rounded up and fractions of a percent less than 0.5 are rounded down. This calculation

excludes capacity related to specialty engines, unassigned capacity, and temporary capacity such as, but not limited to, "Capacity Back Up", "Capacity for Planned Events", and "On/Off CoD".

Percentage of AWLC Eligible Full Capacity MSUs in an Actively Coupled Parallel Sysplex	Reduction in Monthly VWLC
> 0 - 20%	0.5%
21 - 40%	1.5%
41 - 60%	3.0%
61 - 80%	4.0%
81 - < 100%	4.5%

3. IBM's Responsibilities

IBM will:

a. Specify in Appendix Q, or a later version of IBM's Commercial Exhibit (Z125-8538) a) the Eligible Machines and their Full Capacity MSUs, b) the applicable Coupling Facilities, c) Eligible Operating Systems, d) Systems Enablement Functions, and e) the date and the process for transmitting Sub-Capacity Reports to IBM;

b. provide the SCRT;

c. review and validate the Government supplied alternate values indicated in the Sub-Capacity Reports. If appropriate, in IBM's sole discretion, make adjustments to AWLC charges; and

d. register Eligible Machines when the Government submits the initial Sub-Capacity Reports.

4. Government's Responsibilities under Sub-Capacity Pricing

Sub-Capacity Pricing is conditioned upon utilization of capacity approved by IBM and accurate capacity utilization measurement data generated by the operating system and processed by SCRT.

The Government agrees to:

a. promptly install any code required by IBM for IBM Programs or IBM System z Machine Code required by IBM to accurately calculate Sub-Capacity Pricing;

b. not alter, modify, omit, or delete, by any means, directly or indirectly, the:

   1. SMF or SCRT89 records;

   2. SCRT, except for changes provided by IBM; or

   3. Sub-Capacity Reports that the Government submits to IBM, except for those SCRT report fields where the Government comments are expressly required or permitted. Instructions for completion of the required and optional the Government comment fields can be found in the most current version of the SCRT Users Guide (SG24-6522).

c. collect and retain for a period of not less than six months the SMF and SCRT89 data records that are required by SCRT for each Reporting Period from all LPARs on the Eligible Machine. For IBM AWLC Programs that are not reported on SMF 89 records or on SCRT89 records, the Government must use NO89 control statements to identify the LPAR(s) or Guest (LPARs) in which the AWLC Programs ran during any part of the Reporting Period;

d. run the most current version of the SCRT against the collected SMF and SCRT89 data to produce a Sub-Capacity Report from all Eligible Operating System LPARs on the Eligible Machine for which the AWLC Program is licensed. If there have been special circumstances during the Reporting Period, the Government may, in accordance with the then current SCRT Users Guide (SG24-6522), do either of the following: 1) provide alternate values for an AWLC IBM Program that is not reported on SMF 89 or SCRT89 records or 2) use the "Exclude" control statement and provide an explanation of the variance.

e. send to IBM within the time specified in the Exhibit:

1. the initial Sub-Capacity Report that is based on the data for the entire initial Reporting Period for each Eligible Machine that the Government wishes IBM to register for Sub-Capacity Pricing; and

2. subsequent Sub-Capacity Reports that are based on the data for each entire Reporting Period thereafter for each registered Eligible Machine.

Sub-Capacity Reports may not be used to discontinue licenses, report Eligible Machine model downgrades, or to disable IBM Program features.

a. The Government is responsible for monitoring funding allocated on their current Order or Contract and issuing modifications whenever the result of increases and/or decreases in charges exceed such allocated funding. A modification may also be required for line items changes, if required by the order agency. The Government is responsible for paying invoices for all monthly charges.

b. Both IBM and the Government agree that Sub-Capacity Reports that reflect a change to Product LPAR Utilization Capacity or to the inventory of IBM Programs on an Eligible Machine (e.g. new Program, or change in Designated Machine previously identified to IBM) will be considered to be orders placed by the Government. Further action may be required by the Government as a result of the billing increases as described in (a) above. Sub-Capacity Reports not submitted by the "not later than" date specified in the Exhibit will result in IBM Programs being charged on a Full Capacity MSU basis for the Reporting Period;

f. configure the Government's Eligible Machine to send Transmit System Availability Data ("TSAD") weekly to IBM via the Remote Support Facility ("RSF"). This enables IBM to verify that the Product LPAR Utilization Capacity MSUs in the Sub-Capacity Reports the Government submits to IBM are consistent with the Government's actual Eligible Machine configuration. An alternate means for the Government to collect and transmit this data is provided in the SCRT Users Guide (SG24-6522). Failure to submit TSAD may result in IBM Programs being charged on a Full Capacity MSU basis;

g. assign a person in the Government's organization with authority to discuss with IBM and promptly resolve any questions about 1) Sub-Capacity Reports, 2) inconsistencies between the

Sub-Capacity Reports and current license entitlement, and 3) configuration data reported via the RSF;

h. contact IBM if the Government elects to convert from AWLC Sub-Capacity Pricing to AWLC at Full Capacity MSUs;

i. not register, directly or indirectly, IBM Programs with the z/OS IFAUSAGE service, except as directed by the documentation for the IBM Program;

j. not register, directly or indirectly, Non-IBM Programs with the z/OS IFAUSAGE service as an IBM Program with an IBM product identifier; and

k. not cause, directly or indirectly, Product Utilization Capacity to be attributed to another program, either an IBM Program or a Non-IBM Program, when the Product Utilization Capacity is unrelated to that program, except in the case of incidental Product Utilization Capacity associated with diagnosing, monitoring or measuring a program.

5. Compliance Verification

Terms are as outlined in the section titled "Compliance Verification" elsewhere in this Chapter.

5.16.2 EXTENDED LICENSE CHARGE (ELC)

Extended License Charges (ELC) are provided for selected System/390 Programs. These charges are based on the total capacity of the machine on which such Programs will be used, as measured in millions of CPU service units (MSU) per hour. Such charges apply to any System/390 or compatible machine with a capacity greater than 80 MSUs. If any System/390 Program has a use-based charge, the Government may elect that charge in lieu of ELC. The MSU rating for the machines are available on http://www.ibm.com/zseries/library/swpriceinfo/

ELC charges are based on a Base Charge for 80 MSU capacity and an incremental per MSU charge for all additional MSUs above the 80 MSU base.

For System/390 Programs running on machines

    a. Not listed on the website product list

    b. Not listed in a machine group eligible for variable charges, or

    c. For which no MSUs have been established,

IBM shall charge the ELC based on twice the highest MSU rating listed for that vendor's product group identified in Product List.

The Government shall be responsible to:

1. Promptly notify IBM of the date of a change in, or alteration to, the machine that affects the capacity of that machine; and

2. Contact IBM to obtain the applicable charge for System/390 Programs that do not have an ELC, but will be designated to a machine listed on the website.

Programs licensed with ELC qualify as a basic license. There are no ELC options available for Distributed Systems License Option (DSLO) licenses or Multiple Operating System (MOSP).

5.16.3 MULTIPLE OPERATING SYSTEM - PR/SM OPTION (MOSP)

IBM's Multiple Operating Systems - PR/SM Option (MOSP) is a graduated software charge option for customers who operate multiple different operating systems on a single machine. The MOSP reduces graduated charges, Basic and DSLO, for System/370^{TM} and System/390^{TM} system and application programs on qualifying machines. The MOSP charge option is an alternative payment option within the same software group level, and as such does not represent a software group level downgrade, or new release or version of software.

IBM provides the charge option for System/370 or System/390 Variable-Charge Programs when the Programs are designated to 1) a Machine with Processor Resource/Systems Manager^{TM} (PR/SM) installed or 2) a non-IBM Machine with a machine partitioning facility similar to PR/SM installed. Qualifying machine type/models are annotated in Appendix G.

The qualifying machine must have an eligible IBM Program from one of the IBM-defined operating system categories normally running concurrently with an eligible Program from a different IBM-defined category. The eligible Programs must have recurring or one-time charges due or paid.

IBM will make certain Variable-Charge Programs available to the Government at the MOSP, and specify a category for eligible operating system Programs. The IBM-defined operating system categories and the IBM operating system programs in each of them are identified in Appendix J.

Should IBM reassign a Program to a different category, Program licenses with MOSP one-time charges due or paid before the reassignment will not be affected. Any reassignments resulting in lower charges shall be effective as of the date of such change. Any one-time charges that are already paid or are due as of the date of such change will receive no credit or refund.

In order to qualify for the alternative MOSP charges the Government must submit to IBM its delivery order and the completed MOSP document in Appendix J, and comply with the following requirements:

1. Notify IBM of the qualifying Machines and eligible Programs via the MOSP document in Appendix J;

2. Eligible Programs must be concurrently on a qualifying Machine; and

3. The Government must promptly notify IBM if PR/SM or other machine partitioning facility is removed from the qualifying Machine or if the Government ends normal concurrent use of the eligible Programs. In such cases, increased charges apply.

Government entities with a non-IBM operating system program normally in concurrent use with another eligible operating system may qualify for MOSP if the non-IBM operating system program is identified in Appendix J.

For delivery orders accepted by IBM, the effective date for MOSP charges shall be the date the delivery order is accepted by IBM.

5.16.4 PROGRAMS WITH GRADUATED CHARGES

Notwithstanding any other provisions of this Special Item 132-33, the following apply to those licensed programs having Graduated Charges and only to such licensed programs when licensed with Graduated Charges (one-time or monthly charge).

A. Graduated Charges are based on the Processor Group of the Designated Machine Group on which the licensed program is licensed for use and the Government will pay the applicable charges based on such Group (see Appendix G for iSeries and pSeries products). The program group must be equal to or higher than the processor group identified in Appendix G. If the processor group is 32 and the licensed program groups are 30 and 40, the applicable program charge is that of group 40.

B. If a Program with Graduated Charges is licensed for use on an IBM or Non-IBM Machine not listed below, the Charges will be those for the Group with the highest Charges, or those of an alternative charging methodology, such as Indexed Monthly License Charge, as specified by IBM.

Increases in any System z Program Group charges, due to changes in the Group placement for any Machine that they are licensed to, will be in effect for a minimum period of one month.

Programs are not eligible for Graduated Charges, unless approved by IBM, if:

1. Workload License Charges (WLC) are available for the Program, and

2. The program is licensed to an Eligible Machine listed on the Appendix M for IBM System z Workload License Charges, and

3. z/OS is also licensed to the same Eligible Machine.

Product Information for IBM System z and non-IBM Machines can be found at http://www.ibm.com/zseries/library/swpriceinfo/ (See Machines with Group in the Group column).

C. In addition to specifying the Type and Serial or Plant Order Number of the Designated Machine, the Government's delivery order for each Program with Graduated Charges, or the Government's request for a change in the Designated Machine pursuant to "License Details" terms, will also specify the Model and the applicable Group of such Machine.

D. The Government will immediately notify IBM pursuant to "License Details" herein, any change in the Designated Machine. Such changes may result in a change in the applicable Group. Any change in the Graduated Charges associated with the new Group will be as described in Paragraph F below and will become effective upon the date IBM receives the Government's request for a change in the Designated Machine.

E. The installation of an upgrade or downgrade to the Designated Machine may result in a change in the applicable Group. In such event, the Government will notify IBM of such change. If such installation is not performed by IBM, the Government will also inform IBM of the date such machine upgrade or downgrade is installed. Any change in Graduated Charges associated with the new Group will be as described in paragraph F below and will become effective when such machine or upgrade is installed.

F. When the Government changes or upgrades the Designated Machine to a machine in a Group with higher charges, the applicable Group Upgrade Charge will be paid by the Government.

Prices for processor Group to Group upgrades and Non-MOSP to MOSP upgrades are calculated by taking the delta between the two current GSA prices. When the Government changes or downgrades a Designated Machine to a machine in a Group with lower charges, any Graduated Charges due or previously paid for that higher Group will not be adjusted or refunded.

5.16.5 GROWTH OPPORTUNITY LICENSE CHARGE (GOLC)

Any Programs licensed in accordance with the terms herein that require 64-bit z/Architecture hardware in order to execute properly may be licensed only to a Designated Machine that properly implements z/Architecture.

Growth Opportunity License Charges ("GOLC") are available only for Programs which are used on a Machine listed in "System z Machines " table below. However, GOLC may not be available for all Programs used on a listed Machine. If Graduated Monthly License Charges are available for Programs for which GOLC are not available, then a default charge applies which is equal to the Basic Graduated Monthly License Charge for the Machine Group indicated.

GOLC Category	Default Charge Equal to Basic Charges for:
H30	Group 40
H50	Group 50
H70	Group 70

Increases in any System z Program GOLC or default charges, due to changes in the Category placement for any Machine that they are licensed to, will be in effect for a minimum period of one month. For System z and Amdahl/non-IBM Product Information, see http://www.ibm.com/zseries/library/swpriceinfo/ (See Machines with GOLC in the Group column).

5.16.6 MEASURED USAGE LICENSE CHARGE (MULC) OPTION

(Withdrawn effective 1/1/99).

Government customers currently under MULC for which there is no S/390 Usage Pricing option, or OS/390 Version 2 is not installed, may continue under the MULC offering beyond 1/1/99. Products installed, including upgrades to a new version, after 1/1/99, cannot be added to MULC. IBM's latest offering is S/390 Usage identified elsewhere in this SIN.

Measured Usage License Charge (MULC) is an alternative software charging offering. MULC is a periodic charge for specific licensed programs running on eligible versions of MVS/ESA. The periodic charges are monthly and the offering is subject to those terms and conditions contained in this contract.

Since the prices of MULC are contingent upon the installation of a software license and the Government's measuring and reporting of program usage, all initial orders for a recurring software license must be placed as monthly license charge. After the license is installed and usage measured as identified in the section entitled Initial Billing Period, below, Government

customers paying a monthly periodic charge may convert to MULC. Such licenses will then become subject to the terms and conditions of MULC. Initial orders for Batchpipes/MVS should be placed at a funding level consistent with Tier 6. A subsequent delivery order modification should be made after the initial measurements have been completed and the proper charge established.

No conversions are permitted from Federal License Payment Plan (FLPP) to MULC.

If MULC is selected, all functions of the license must be on the MULC offering.

All MULC licenses carry the entitlements of a Basic License. No DSLO or MOSP pricing options are available.

Measurement Recording

By issuing an order to convert from MLC to MULC, the Government is agreeing:

A. To use, unmodified, the measurement function, provided in the operating system Program, or as a temporary program fix, and

B. To use, unmodified, the reporting function, which is provided in the IBM Usage Software Report Program, provided AS IS, and

C. Not to alter the records collected by the measurement or reporting function.

Determining Measured Usage License Charges

Program usage is measured in machine service units called CPU Service Units (CPU SUs) or gigabytes (GB) (for Batchpipes/MVS). The monthly MULC is determined by applying the CPU SU/GB measurement for a Program to a charge established for a range of measurements identified as a usage band. Usage bands are identified in Appendix K.

When multiple versions of a Program are being used on a machine, the usage band is determined by;

1. Aggregating the CPU SUs/GBs consumed by all the versions eligible for MULC, and

2. Applying the aggregated CPU SU/GB measurement to the charge applicable to the latest version of the Program installed on the machine.

Single Version Charging, as described in Appendix I, and elsewhere in this SIN, does not apply under MULC.

Measurements recorded during IBM's normal test allowance period are disregarded in determining Program usage.

If the Government adds a new version of a Program during a billing period, charges will be based on the charge for the latest version, following any applicable test allowance period.

Initial Billing Period

To convert from MLC to MULC, the Government further agrees to:

A. Activate the measurement function and IBM Usage Software Report Program, and run them for one month (contiguous days) against all copies of an eligible program. This month need not coincide with a calendar month boundary, and

B. Continuously run the measurement function throughout the initial and subsequent billing periods, and

C. Provide IBM with the CPU SU/GB measurements report created by the IBM Usage Software Report Program within 10 business days after the measurements are completed. Measurements are completed twice:

1. Initially at the end of one month as identified above, and

2. Within 10 business days after the end of the initial billing period. This measurement will cover the billing period as described below:

    a. 11/1 thru 9/30 for a program on MULC for the entire prior fiscal year, or

    b. The entire billing period for a program converted after 10/1 of the prior fiscal year; i.e., the measurement report for a program converted 6/1 will cover the period 6/1 through 9/30.

To establish the CPU SU/GB measurement, IBM will:

A. Determine the highest daily usage of the Program, which is the highest of 24 hourly CPU SU/GB measurements recorded each day, and

B. Determine the highest monthly usage of the Program, which, for MULC, is defined as the fourth highest daily CPU SU/GB measurement recorded for the month. This is the measurement used to determine the usage band, and

C. Upon commitment to convert to MULC, evidence of which shall be a written order specifying MULC for the identified Program, including serial number, charges will commence on the first day of the calendar month in which CPU SU/GB measurement and recording is completed.

The initial billing period shall be defined as the period commencing on the conversion date and ending on the last date of the contract period, generally the end of the Government's fiscal year. The initial billing period must commence on or before August 1 of the fiscal year.

When the Government's data collection period begins after August 1, and the customer chooses to convert to MULC, the effective date for conversion will be 10/1 of the subsequent fiscal year, and the usage band will be based on the highest monthly usage on the measurement report.

Renewal Billing Periods

The highest monthly CPU SU/GB measurement for the prior billing period as described above (Initial Billing Period (C)(2)(b)) will be the basis for establishing charges for subsequent billing periods.

The Government may end participation in this offering at the end of each fiscal year. If participation is ended (converted to MLC, PSLC IMLC), the Government may not resume participation in this offering for six months. If the Government wishes to convert back to this offering after a minimum of six months, the MULC will be based on the CPU SU/GB measurements report, provided by the Government, for the period from which the Government was last on the MULC offering, up to a maximum period of 12 months. In any event, such conversion back to MULC may not occur after 8/1 of the fiscal year.

IBM reserves the right to convert the charges for the Program to MLC if the Government fails to provide IBM with the CPU SU/GB measurements report within the specified time period.

5.16.7 PARALLEL SYSPLEX LICENSE CHARGE (PSLC)

Parallel Sysplex License Charges are available for selected System/390 Programs when these Programs are designated to

A. Parallel Sysplex single machine environment (no coupling required) or;

B. A Parallel Sysplex actively coupled environment - for two or more machines.

Programs licensed with PSLC prices qualify as a basic license; no DSLO pricing is available with PSLC.

However, a basic PSLC license can serve as the basic license upon which other DSLO licenses may operate.

MOSP is not available with PSLC.

The pre-requisite hardware and software products and requirements for being actively coupled, which may qualify a Government user for PSLC pricing are identified on Appendix L.

The PSLC charging option is available as a continuous, monthly charge.

Parallel Sysplex License Charges for machines in a Single Machine Environment (PSLC/E) are available only for Programs which are used on a Machine listed on the website.

If a Program with PSLC/E charges is licensed for use on an IBM Machine not listed below, the charges will be based on twice the highest MSU rating listed.

Increases in any System z Program PSLC/E charges, due to changes in the MSU rating for any Machine that they are licensed to, will be in effect for a minimum period of one month.

You must be operating z/TPF, MVS or OS/390 V1 or z/OS on the Machine.

For Designated Machines running z/TPF: Parallel Sysplex License Charge – Single Machine Environment may apply. However, Programs with WLC may not be licensed to the same Designated Machines.

For all other Designated: Programs are not eligible for Parallel Sysplex License Charges - Single Machine Environment, unless approved by IBM or except as described in Appendix L, if:

1. Workload License Charges (WLC) are available for the Program, and

2. The Program is licensed to an Eligible Machines listed on Appendix M, and

3. z/OS is also licensed to the same Eligible Machine.

For System z and Amdahl and Hitachi Data Systems product information see http://www.ibm.com/zseries/library/swpriceinfo/ (See Machines with PSLC = Yes or PSLC = Single in the PSLC column)

Government responsibilities:

The Government shall promptly notify IBM:

1. When it has an actively coupled Parallel Sysplex environment.

2. If the Parallel Sysplex environment ceases to be actively coupled. In such case, charges will revert to IBM's generally available recurring charges; and

3. If the Government adds or removes machines from the environment. In such cases, the PSLC will be adjusted.

5.16.8 INDEXED MONTHLY LICENSE CHARGE (IMLC)

Indexed monthly license charges are provided for selected System/390 Programs. These charges are based on the total capacity of the machine on which such Programs will be used, as measured in millions of CPU service units (called "MSU") per hour. Such charges apply to any System/390 or compatible machine with a capacity greater than 80 MSUs, not eligible for Parallel Sysplex license charges. If any System/390 Program has a use-based charge, the Government may elect that charge in lieu of IMLC.

Programs licensed with IMLC prices qualify as a basic license; no DSLO pricing is available with IMLC. However, a basic license can serve as the basic license upon which other DSLO licenses may operate.

MOSP is not available with IMLC.

The IMLC charging option is available as a continuous, monthly charge.

For System/390 Programs running on machines (1) not listed in the IMLC exhibit, (2) not listed in a machine group eligible for variable charges, or 3) for which no MSUs have been established, IBM shall charge the IMLC for 200 MSUs.

The Government shall be responsible to:

A. Promptly notify IBM of the date of a change in, or alteration to, the machine that affects the capacity of that machine; and

B. Contact IBM to obtain the applicable charge for System/390 Programs that do not have an IMLC, but will be designated to a machine listed in the IMLC Exhibit.

Programs are not eligible for Indexed Monthly License Charges, unless approved by IBM, if: 1) Workload License Charges (WLC) are available for the Program, and 2) the Program is licensed to an Eligible Machine listed on Appendix M, zSeries Workload License Charges, and 3) z/OS is also licensed to the same Eligible Machine.

The current product information for eligible IBM machines, Hitachi Data Systems, and Amdahl Corporation may be found at http://www.ibm.com/zseries/library/swpriceinfo.

5.16.9 SYSTEM Z NEW APPLICATION LICENSE CHARGE

a. Any Programs licensed in accordance with the terms herein that require 64-bit z/Architecture hardware in order to execute properly may be licensed only to a Designated machine that properly implements z/Architecture.

Eligibility:

To be eligible for New Application License Charges ("NALC Charges"), the Government must have:

1. a machine that is specified at the website below as eligible for NALC Charges and, installed and dedicated to server consolidation of Unix or NT platform print or file server workloads or to

2. one or more of the following qualifying applications specified at the website below ("Qualifying Application(s)")

3. IBM Programs and Features (called "Eligible Programs") specified at the website below as Eligible for NALC Charges:

http://www.ibm.com/zseries/library/swpriceinfo/

The Government agrees to promptly notify IBM at any such time that the machine ceases to be dedicated to server consolidation or to one or more of the Qualifying Applications.

IBM may, from time to time but not more than once in a calendar year ask verification in writing that the Government still meets the eligibility criteria specified above. The Government agrees to promptly provide IBM with such written verification upon request. At any such time that 1) the machine ceases to be dedicated to server consolidation or to one or more of the Qualifying Applications or 2) you fail to promptly provide IBM with the written certification upon request as described above, New Application License Charges will be terminated and the then current monthly license charge will immediately apply.

NOTE: Eligible programs do not qualify as Basic licenses for additional DSLO licenses.

Upgrades and Downgrades:

Upgrades to an eligible processor will result in an increase in the New Application License Charges.

Downgrades to an eligible processor will result in a decrease in the recurring charge.

License Redesignation:

The Government must promptly notify IBM if the eligible Program is redesignated to another machine. New Application License Charges will terminate and then current license charges will immediately apply.

b. zNALC License Charges on IBM System z

1. Definitions

Eligible Machine	A Machine to which an Eligible Operating System is licensed and which is listed on the following website, with "zN" in the zNALC column: http://www.ibm.com/zseries/library/swpriceinfo/. An Eligible Machine is a Designated Machine that is eligible to receive zNALC pricing as described herein.
Eligible Operating System	z/OS (5694-A01) is the only Eligible Operating System
Full Capacity MSUs	The total capacity of an Eligible Machine as specified at http://www.ibm.com/zseries/library/swpriceinfo/.
MSUs	Millions of Service Units per hour. Units of Workload capacity of an Eligible Machine.
Product LPAR Utilization Capacity	The highest number of MSUs utilized by the combined logical partitions ("LPARs") in which z/OS (with zNALC charges) runs concurrently during a Reporting Period. The number of MSUs is based on a 4-hour rolling average utilization.
Reporting Period	The period which begins on the second day of a month and ends on the first day of the following month.
Sub-Capacity Pricing	Charges for z/OS (with zNALC charges) based on less than Full Capacity MSUs.
Sub-Capacity Report	A report generated by the IBM Sub-Capacity Reporting Tool. The tool analyzes System Management Facilities ("SMF") data and calculates the Product LPAR Utilization Capacity for z/OS (with zNALC charges). The Sub-Capacity Report includes this calculation. Customer is required to submit the report to IBM only if Sub-Capacity Pricing is in effect.
zNALC	System z New Application License Charges ("zNALC") charges are available only for z/OS running on an Eligible Machine. zNALC charges allow for Sub-Capacity Pricing and Parallel Sysplex aggregation.
zNALC LPAR(s)	One or more LPARs where z/OS (with zNALC charges) is running.

2. Qualified Applications:

1. An "Application" is a computer program that is used to accomplish specific business tasks (such as Customer Relationship Management ("CRM"), Enterprise Resource Planning ("ERP"), Supply Chain Management ("SCM"), business information warehouse, accounting and inventory control programs), including the database server used for that task. In this definition, an Application is not a standalone database management system or systems management tool (i.e., related to the management or operation of the computer itself or of other computer programs). Examples of software

that are not considered Applications are operating system software, database products (except as qualifying in the section below), transaction managers, tools, utilities and games.

2. An Application may be considered a "Qualified Application" if it is:

    a. currently generally commercially available, supported by its manufacturer and enabled to run under z/OS, and that same Application (with substantially the same functionality) is simultaneously generally commercially available, supported by its manufacturer on, and enabled to run under a UNIX operating system (e.g., AIX, HP-UX, Linux or Solaris), or Microsoft Windows (collectively "Distributed Platforms"); or

    b. a database server running under z/OS and it is operating solely in support of a software program that is currently generally commercially available, supported by its manufacturer and running in a client/server environment where the business logic (e.g., application server) is running on a Distributed Platform; or

    c. Java language business applications running under WebSphere Application Server (or equivalent). These do not include systems management tools.

3. IBM will determine whether a particular software program is a Qualified Application.

    NOTE: For additional information and a few examples of approved zNALC Qualified Applications, see:

    http://ibm.com/zseries/swprice/znalc.html/

3. Requirements for z/OS with zNALC Charges

1. z/OS (with zNALC charges) must be licensed to an Eligible Machine.

2. z/OS IBM middleware running on a zNALC LPAR must be priced with either Workload License Charges ("WLC"), Entry Workload Charges ("EWLC"), or Select Application License Charges ("SALC"), if such charge, as applicable is available.

3. zNALC LPARs must be used exclusively for the Qualified Application and for programs that support the Qualified Application and for no other purpose.

4. z/OS (with zNALC charges) may not be licensed to the same Eligible Machine as either z/OS.e or as z/OS with New Application License Charges ("NALC").

5. z/OS (with zNALC charges) may not be licensed to the same Eligible Machine as OS/390 or MVS.

6. z/OS (with Sub-Capacity zNALC charges) may not run as a guest of any version of VM or z/VM unless:

    a. z/OS APAR OA20314 was applied to the z/OS guest system before it was IPL'd, and

    b. SCRT Version 14.2.0 or higher is used to create the SRCT report.

7. z/OS (with zNALC charges) may not run on any z890 Capacity Setting 110 server or on any z9 BC Capacity Setting A01 server.

8. The first four letters of each zNALC LPAR must be "ZNAL". Alternatively, if Customer prefers not to change LPAR names to qualify for zNALC, and is running z/OS V1.6 or

higher, Customer may set the "LICENSE=ZNALC" IPL parameter to indicate a zNALC LPAR,

NOTE: The zNALC IPL Parameter is available via APAR OA210314.

Any copies of Eligible Operating Systems that run on an Eligible Machine must run in z/Architecture (64-bit) mode.

9. Customer agrees to certify to IBM:

   a. initially that Customer is eligible for zNALC under the terms prescribed herein for this offering, and

   b. annually that Customer is and has been continuously eligible for zNALC under the terms provided herein.

   zNALC Annual Eligibility Certification Form will be provided to the customer .

   Failure to submit a zNALC Annual Eligibility Certification Form will result in termination of zNALC charges. The z/OS license will revert to then-available charges.

4. Charges

1. When zNALC charges apply to z/OS:

   a. monthly charges are based on the number of MSUs reported for z/OS (with zNALC charges) in the Sub-Capacity Report for the specified Eligible Machine during a Reporting Period. This value corresponds to the Product LPAR Utilization Capacity or, on a non-partitioned Eligible Machine, must equal the Full Capacity MSUs. If Sub-Capacity Pricing is not in effect, monthly charges are based on Full Capacity MSUs;

      NOTE: Information on IBM's billing process, including how to determine the applicable Reporting Period for a particular month's charges, can be found on the Sub-Capacity Corner website at http://www.ibm.com/zseries/swprice/subcap/;

   b. z/OS (with zNALC charges) licenses are initially charged at Full Capacity MSUs until IBM has processed the initial Sub-Capacity Report on that Eligible Machine, enabling Sub-Capacity Pricing;

   c. once Sub-Capacity Pricing has commenced for z/OS (with zNALC charges) on an Eligible Machine, if z/OS (with zNALC charges) does not appear in a Sub-Capacity Report subsequent to its initial monthly charge, it will be charged at the minimum zNALC MSUs.

      NOTE: IBM specifies minimum zNALC MSUs in its programming announcements;

   d. eligible features of z/OS (with zNALC charges) have the same MSUs as z/OS (with zNALC charges);

   e. the number of MSUs associated with a zNALC LPAR is equivalent to the highest observed rolling 4-hour average utilization in a Reporting Period. Customer may manage zNALC LPAR utilization by explicitly specifying the defined capacity of the zNALC LPAR(s) on the Hardware Management Console ("HMC"). However, this is not required to obtain Sub-Capacity Pricing. If Customer chooses to specify the defined capacity for a particular zNALC LPAR, the Sub-Capacity Reporting Tool will

use the lower of the specified capacity or the 4-hour rolling average in order to determine the number of MSUs associated with z/OS (with zNALC charges);

f. the capping function in z/OS (with zNALC charges) is used to ensure the workload does not exceed the LPAR defined capacity Customer has specified on a 4-hour rolling average. To achieve this, the capping function may automatically reduce and limit computer resources to workloads running in that LPAR. By defining the LPAR capacity, Customer authorizes the capping function to cap the computer's resources as defined; and

g. increases in Full-Capacity MSU Charges for z/OS (with zNALC charges), due to changes Customer makes in the MSU capacity for any Eligible Machine that it is licensed to, will be in effect for a minimum period of one month.

2. Calculation of Sub-Capacity MSUs when an Eligible Machine has z/OS licensed with Sub-Capacity charges for both a) zNALC and b) WLC/EWLC:

If the total MSUs for both z/OS (with zNALC charges) plus the z/OS (with WLC or EWLC charges) shown on the Sub-Capacity Report exceed the highest rolling 4-hour average of the Eligible Machine ("Peak Measurement"), then IBM will reduce the z/OS (with zNALC charges) MSUs so that the total MSUs do not exceed the Peak Measurement. However, the z/OS (with zNALC charges) MSUs will not be reduced below the minimum zNALC MSUs.

NOTE: IBM specifies minimum zNALC MSUs in its programming announcements.

NOTE: If an Eligible Machine has z/OS with full-capacity WLC or EWLC charges, then zNALC pricing should be avoided, However, if z/OS with VWLC or EWLC charges is co-resident with z/OS (with zNALC charges), then IBM recommends Sub-Capacity pricing be implemented.

3. When aggregated zNALC charges apply to z/OS, aggregated charges:

a. are available only for z/OS (with zNALC charges) used on an Eligible Machine in a Parallel Sysplex;

b. are based on the sum of the MSUs on the Sub-Capacity Reports that Customer submits to IBM for each copy of z/OS (with zNALC charges) installed on qualifying Eligible Machines in a Parallel Sysplex. If Sub-Capacity Pricing is not in effect, aggregated charges are based on Full Capacity MSUs; and

c. require two or more Eligible Machines actively coupled using the applicable coupling links and Coupling Facility specified in Appendix M sections 3 and 4, or the most current Commercial Exhibit, Z125-7455.

To be actively coupled, the following criteria must be met:

i. All Eligible Machines in the Parallel Sysplex must be physically attached via coupling links to a common Coupling Facility. In addition, time synchronization must be provided using either timer links to a common Sysplex Timer or coupling links transporting Server Time Protocol ("STP") timing information in an STP Coordinated Timing Network ("CTN").

If a Coupling Facility is divided into LPARs, all Eligible Machines must be attached to the same Coupling Facility LPAR.

ii. All Eligible Operating System images that comprise the Parallel Sysplex environment must have at least one common Systems Enablement Function, specified in the Exhibit, activated to use the Coupling Facility across all images in the Parallel Sysplex.

iii. The configuration and operating modes described herein this Attachment must be the normal mode of operations for this environment.

iv. An Eligible Machine can only be in one Parallel Sysplex for pricing purposes. The zNALC Eligible Operating System images participating in the Systems Enablement Function(s) must account for at least 50 percent of the total zNALC Eligible Operating System workload on each Eligible Machine.

In the event there are two LPARs, each 50 percent of the total zNALC Eligible Operating System workload, connected to two Parallel Sysplexes, Customer may select which Parallel Sysplex the Eligible Machine will be included in for billing.

v. On an annual basis, upon IBM's request, Customer will provide IBM with a completed IBM Sysplex Verification Package (Additional information can be found at http://ibm.com/zseries/swprice/sysplex/) for any year during which Customer receives aggregated zNALC pricing.

4. Additional information regarding the technical aspects of Parallel Sysplex aggregation and detailed information on tools, processes and procedures may be found at the Sysplex Aggregation website at the following URL: http://ibm.com/zseries/swprice/sysplex

5. IBM's Responsibilities

IBM will:

1. specify in Appendix M, or a later the current commercial version of Exhibit Z125-7455 the a) Applicable Coupling Facilities, b) Systems Enablement Functions, and c) the date and the process for transmitting Sub-Capacity Reports to IBM;

2. make available the Sub-Capacity Reporting Tool;

3. adjust zNALC charges in response to the changes Customer indicates on the Sub-Capacity Reports that Customer submits; and

4. register Eligible Machines when Customer submits the initial Sub-Capacity Reports.

6. Government Responsibilities under Sub-Capacity Pricing

Government agrees:

1. to promptly install any enabling code for z/OS (with zNALC charges) or IBM System z Licensed Internal Code ("LIC") required for Sub-Capacity Pricing;

2. to collect, and retain for a period of not less than six months, the SMF data records for all LPARs, by Eligible Machine, required by the Sub-Capacity Reporting Tool for each Reporting Period;

3. to run the most current version of the Sub-Capacity Reporting Tool against the collected SMF data to produce a Sub-Capacity Report. If there have been special circumstances during the Reporting Period, Customer may also provide alternate values, as defined in the

SCRT Users Guide (SG24-6522), for z/OS (with zNALC charges) with an explanation for the variance;

4. to send to IBM within the time specified in the Exhibit,

   a. the initial Sub-Capacity Report that is based on the data for the entire initial Reporting Period for each Eligible Machine that Customer wishes IBM to register for Sub-Capacity Pricing; and

   b. subsequent Sub-Capacity Reports that are based on the data for each entire Reporting Period thereafter, for each registered Eligible Machine;

5. to not use Sub-Capacity Reports to order or discontinue licenses, move licenses between Eligible Machines, report Eligible Machine model upgrades, and enable or disable features for z/OS (with zNALC charges);

6. that Customer considers Sub-Capacity Reports that reflect a changed Product LPAR Utilization Capacity to be orders placed by Customer without further action on Customer's part, and Customer authorizes IBM to make any resulting billing increase or decrease;

7. that Sub-Capacity Reports not submitted by the "not later than" date specified in the Exhibit will result in z/OS (with zNALC charges) being charged on a Full Capacity MSU basis for the Reporting Period;

8. to configure Customer's Eligible Machine to send Transmit System Availability Data ("TSAD") weekly to IBM via the Remote Support Facility ("RSF"). This enables IBM to verify that the Product LPAR Utilization Capacity MSUs in the Sub-Capacity Reports that Customer submits to IBM are consistent with Customer's actual Eligible Machine configuration. An alternate means for Customer to collect and transmit this data is provided in the "z/OS Planning for Sub-Capacity Pricing" publication. Failure to submit TSAD may result in z/OS (with zNALC charges) being charged on a Full Capacity MSU basis;

9. to assign a person in Customer's organization with authority to discuss and promptly resolve any questions on Sub-Capacity Reports or inconsistencies between Sub-Capacity Report contents or current license entitlement, and configuration data reported via the RSF; and

10. to notify IBM if Customer elects to convert from Sub-Capacity Pricing to zNALC at Full Capacity MSUs.

11. The Government is responsible for monitoring funding allocated on their current Order or Contract and issuing Modifications whenever the result of increases and/or decreases in charges exceed such allocated funding. A Modification may also be required for line item changes, if required by the ordering agency. The Government is responsible for paying invoices for all monthly usage

Subcapacity Reporting

The Government is responsible for transmitting the Sub-Capacity Reports to IBM per the process outlined in the following website http://ibm/com/zseries/swprice/scrt/. Reports are due by the second, but not later then the ninth, calendar day of each month.

IBM System z Midrange Workload License Charges

Definitions

Eligible Machine	A Machine to which an Eligible Operating System is licensed, and which is listed on the following website, with "M" in the MWLC column: http://www.ibm.com/zseries/library/swpriceinfo/. An Eligible Machine is a Designated Machine that is eligible to receive MWLC pricing as described herein.
Eligible Operating System	An Eligible Operating System for the Midrange product. Current Operating System is z/VSE V4 – 5686-CF8
Full Capacity MSUs	The total capacity of an Eligible Machine..
MSUs	Millions of Service Units per hour. Units of Workload capacity of an Eligible Machine.
Product LPAR Utilization Capacity	The highest number of MSUs utilized by the combined logical partitions ("LPARs") in which a Midrange Workload License Charge ("MWLC") IBM Program runs concurrently during a Reporting Period. The number of MSUs is based on a 4-hour rolling average utilization.
Reporting Period	The period which begins on the second day of a month and ends on the first day of the following month.
Sub-Capacity Pricing	MWLC IBM Programs based on less than Full Capacity MSUs.
Sub-Capacity Report	A report generated by the IBM Sub-Capacity Reporting Tool ("SCRT") or delivered by IBM to Customer per the section below entitled "Customer Responsibilities under Sub-Capacity Pricing." The tool analyzes SCRT89 records (which are generated by an Eligible Operating System) and customer input. The tool then calculates the Product LPAR Utilization Capacity for MWLC IBM Programs. Customer is required to submit the report to IBM only if Sub-Capacity Pricing is in effect.
MWLC	Midrange Workload License Charges available for selected IBM Programs which are used on an Eligible Machine and are running under an Eligible Operating System, including the Eligible Operating System. MWLC charges allow for Sub-Capacity Pricing.

7. Charges

1. Customer may select MWLC on an Eligible Machine only if an Eligible Operating System is licensed to that Eligible Machine. In addition, any copies of Eligible Operating Systems that run on an Eligible Machine must run in z/Architecture (64-bit) mode.

2. If Customer selects MWLC for any IBM Program on an Eligible Machine, then Customer must select MWLC for all IBM Programs on that Eligible Machine for which MWLC is available.

3. If z/VSE Version 3 or prior is licensed to an Eligible Machine, then MWLC on that Eligible Machine is based on Full Capacity MSUs.

4. When MWLC applies to IBM Programs:

   a. monthly charges are based on the number of MSUs reported in the MWLC IBM Program's Sub-Capacity Report for the specified Eligible Machine during a Reporting Period. This value corresponds to the Product LPAR Utilization Capacity or, on a non-partitioned Eligible Machine, must equal the Full Capacity MSUs. If Sub-Capacity Pricing is not in effect, monthly charges are based on Full Capacity MSUs;

      NOTE: Information on IBM's billing process, including how to determine the applicable Reporting Period for a particular month's charges, can be found on the Sub-Capacity Corner website at http://www.ibm.com/zseries/swprice/subcap/;

   b. Eligible Operating System licenses are charged at Full Capacity MSUs until IBM has processed the initial Sub-Capacity Report for that Eligible Operating System on that Eligible Machine, enabling Sub-Capacity Pricing;

   c. the initial monthly charges for an IBM Program (other than the Eligible Operating System) eligible for MWLC charges are based upon the applicable Eligible Operating System MSUs;

   d. once Sub-Capacity Pricing has commenced for an MWLC Eligible Operating System on an Eligible Machine, if an MWLC IBM Program does not appear in a Sub-Capacity Report subsequent to its initial monthly charge, it will be charged at the minimum MWLC MSUs;

      NOTE: IBM specifies minimum MWLC MSUs in its programming announcements;

   e. if Customer selects Sub-Capacity Pricing for any MWLC IBM Program on an Eligible Machine, then Customer must select Sub-Capacity for all MWLC IBM Programs on that Eligible Machine for which Sub-Capacity is available;

   f. MWLC features have the same MSUs as the MWLC IBM Program;

   g. when z/VSE V4 runs as a guest under z/VM V5.1 or lower, it is not eligible for Sub-Capacity Pricing. However, if it runs as a guest under z/VM V5.2 or higher, it may be eligible for Sub-Capacity Pricing;

   h. for Sub-Capacity Pricing the number of MSUs associated with an LPAR (or associated with the MWLC Program itself, if it runs under z/VM V5.2 or higher) is equivalent to the highest observed rolling 4-hour average utilization in a Reporting Period; and

   i. increases in Full-Capacity MSU charges will be in effect for a minimum of one month.

8. IBM's Responsibilities

IBM will:

1. specify

   a. Eligible Operating Systems, and

   b. the date and the process for transmitting Sub-Capacity Reports to IBM (see below);

2. specify all IBM Programs eligible for MWLC charges at http://www.ibm.com/zseries/library/swpriceinfo/. (Click on "Sub-Capacity Monthly License Charge Products");

3. make available the Sub-Capacity Reporting Tool;

4. generate a Sub-Capacity Report from the data sent by Customer in the three attachments described below, and return a Sub-Capacity Report or error report within two business days;

5. adjust MWLC in response to the MSUs on the Sub-Capacity Reports that Customer submits; and

6. register Eligible Machines when Customer submits the initial Sub-Capacity Reports.

9. Customer Responsibilities under Sub-Capacity Pricing

Customer agrees:

1. to promptly install any enabling code for MWLC IBM Programs or IBM System z Licensed Internal Code ("LIC") required for Sub-Capacity Pricing;

2. to run the most current version of the Sub-Capacity Reporting Tool, if SCRT reporting is required;

3. to collect, and retain for a period of not less than six months, the SCRT89 data records for all LPARs, by Eligible Machine, required by the Sub-Capacity Reporting Tool for each Reporting Period;

4. a) if z/OS is available to run SCRT, to run the Sub-Capacity Reporting Tool against the collected SCRT89 data to produce a Sub-Capacity Report;

   b) if z/OS is not available to run SCRT, to submit 1) attachment "(A)" listed below to IBM via File Transfer Protocol ("FTP") and 2) an email to vse@de.ibm.com with attachments "(B)" and "(C)" listed below. The three attachments must be submitted by the fifth day of each month following data collection (e.g., data collected September 2 – October 1 must be submitted on or before October 5th). IBM will return a Sub-Capacity Report (or information on an error situation) within two business days. Customer is then responsible for submitting the SCRT Report per the terms below in this section.

   NOTE: The available FTP servers are specified on http://ibm.com/vse;

   c) if the SCRT becomes available to run natively on z/VSE, Customer must begin using the SCRT for z/VSE within 60 days of general availability.

   The three required attachments are:

   (A) the SCRT89 records for each LPAR in the Eligible Machine. Failure to submit SCRT89 records for all LPARs of the Eligible Machine may result in MWLC IBM Programs being charged on a Full Capacity MSU basis for the Reporting Period;

   (B) the complete set of required SCRT PARMS control statements:

   i. Customer_Name=

   ii. Customer_Number=

iii. Contact_Name=

iv. Contact_email=

v. Contact_Phone=

NOTE: IBM will make available a file containing the standard SCRT PARMS control statements and descriptive comment statements; and

(C) the completed set of NO89 control statements for eligible IBM Programs listed above that do not create SCRT89 records.

NOTE: IBM will make available a file containing standard SCRT NO89 VSE control statements and descriptive comments;

5. to update the Sub-Capacity Report if there have been special circumstances during the Reporting Period. Customer may provide alternate values, as defined in the *SCRT Users Guide* (SG24-6522), for each MWLC IBM Program with an explanation for the variance;

6. to send to IBM within the time specified in the Exhibit:

   a. the initial Sub-Capacity Report that is based on the data for the entire initial Reporting Period for each Eligible Machine that Customer wishes IBM to register for Sub-Capacity Pricing; and

   b. subsequent Sub-Capacity Reports that are based on the data for each entire Reporting Period thereafter, for each registered Eligible Machine;

7. to not use Sub-Capacity Reports to order or discontinue licenses, move licenses between Eligible Machines, report Eligible Machine model upgrades, or enable or disable MWLC IBM Program features;

8. that Customer considers Sub-Capacity Reports that reflect a changed Product LPAR Utilization Capacity to be orders placed by Customer without further action on Customer's part, and Customer authorizes IBM to make any resulting billing increase or decrease;

9. that Sub-Capacity Reports not submitted by the "not later than" date specified in the Exhibit will result in MWLC IBM Programs being charged on a Full Capacity MSU basis for the Reporting Period;

10. to configure Customer's Eligible Machine to send Transmit System Availability Data ("TSAD") weekly to IBM via the Remote Support Facility ("RSF"). This enables IBM to verify that the Product LPAR Utilization Capacity MSUs in the Sub-Capacity Reports that Customer submits to IBM are consistent with Customer's actual Eligible Machine configuration. An alternate means for Customer to collect and transmit this data is provided in the "z/OS Planning for Sub-Capacity Pricing" publication. Failure to submit TSAD may result in MWLC IBM Programs being charged on a Full Capacity MSU basis;

11. to assign a person in Customer's organization with authority to discuss and promptly resolve any questions on Sub-Capacity Reports or inconsistencies between Sub-Capacity Report contents or current license entitlement, and configuration data reported via the RSF; and

12. to notify IBM if Customer elects to convert from Sub-Capacity Pricing to MWLC at Full Capacity MSUs.

13. The Government is responsible for monitoring funding allocated on their current Order or Contract and issuing Modifications whenever the result of increases and/or decreases in charges exceed such allocated funding. A Modification may also be required for line item changes, if required by the ordering agency. The Government is responsible for paying invoices for all monthly usage

Subcapacity Reporting

The Government is responsible for transmitting the Sub-Capacity Reports to IBM per the process outlined in the following website http://ibm/com/zseries/swprice/scrt/. Reports are due by the second, but not later than the ninth, calendar day of each month.

5.16.10 IBM SYSTEM Z USAGE PRICING CHARGES

Any Programs licensed in accordance with the terms herein that require 64-bit z/Architecture hardware in order to execute properly may be licensed only to a Designated Machine that properly implements z/Architecture.

The terms of this offering apply to selected IBM System z Programs that have a Usage Pricing Charge, which is a monthly recurring charge. To qualify for Usage Pricing, the eligible program must be running on a Machine or in a qualified Parallel Sysplex (R) where OS/390 Version 2, z/OS or later is running in at least one LPAR partition on the Machine or in the Parallel Sysplex. For each selected Program (Program "Base," where multiple "Bases" of a Program are eligible) the Government may elect a Usage Pricing Charge or any other applicable recurring charge.

Machines or Parallel Sysplexes running OS/390 Auto UNIX do not qualify for S/390 Usage. Pricing Charges as OS/390 Auto UNIX is a pre-configured UNIX-only system without the ability to activate the usage measurement function.

1. Measurement Recording:

Program usage will be measured as specified in the Exhibit (Appendix N) for IBM System z Usage Pricing Charges. To measure and record measurement data, the Government agrees to use, unmodified on all MVS/ESA, OS/390, z/OS and z/OS.e LPARs on the Machine for which the Program is licensed and on all Machines which are actively coupled to that Machine in a Parallel Sysplex, 1) the usage measurement function, which IBM provides in the operating system Program and 2) a reporting function, which IBM provides in the IBM Software Usage Report Program. The Government agrees not to alter 1) the records collected by the usage measurement function; 2) the IBM Software Usage Report Program, except for changes provided by IBM; or 3) the Software Usage reports, generated by the Software Usage Report Program, which the Government will provide to us.

2. Billing Periods

The Government's billing period is the fiscal year. However, IBM will permit the initial billing period to be less to allow for fiscal year alignment.

To establish the usage for a billing period, using the measurement function IBM provides we identify your:

A. Highest daily usage of a Program, which is the highest of 24 hourly measurements recorded each day;

and

B. Monthly usage of Program, which is the fourth highest daily measurement recorded for a month.

The Government agrees to:

A. Run IBM's usage measurement function throughout initial and subsequent billing periods on all MVS/ESA, OS/390, z/OS and z/OS.e LPARs on the Machine for which the Program is licensed and on all Machines coupled to that Machine in a Parallel Sysplex;

B. Reinitialize all copies of DB2 after the usage measurement function has been activated, whenever DB2 usage is being measured for Usage Pricing Charges; and

C. Provide IBM with a Software Usage Report generated by the Software Usage Report Program for (1) each machine not in a Parallel Sysplex, (a separate report for each Machine) and (2) all Machines which are actively coupled in the same Parallel Sysplex (a separate report for all Machines within a Parallel Sysplex, i.e., a separate report for each Parallel Sysplex). The Government must provide these Software Usage Reports within ten business days after the usage measurements are completed one month prior to the end of each billing period.

Initial Billing Period

To establish the measurement for the initial billing period, the Government will run the usage measurement function for two months (contiguous days) against all copies and version of an eligible Program. These months need not be calendar months. The Government must start the measurement period on a day when the eligible Program is running on the Machine and run the usage measurement function on all MVS/ESA and OS/390 LPARs on the Machine or Parallel Sysplex.

The higher monthly usage of the initial two-months determines the Government's monthly Usage Pricing Charge for the fiscal year.

The initial billing period begins on the first day of the first full calendar month in which usage measurement is collected.

Transitioning from MULC

The highest monthly usage, derived from the preceding Measured Usage License Charge (MULC) billing period (including one month before that billing period and excluding the final month of the billing period), will be used to determine the Government's monthly Usage Pricing Charge when transitioning a Program under MULC to Usage Pricing Charges.

Subsequent Billing Periods

The Government agrees to provide the Software Usage Report for the billing period within the first ten business days of the final month of the previous billing period.

The highest monthly usage measured for the initial billing period (excluding those recorded in the final month) will be the basis for establishing charges for the second billing period. For subsequent billing periods, the highest Monthly Usage measured for the prior 12 months, starting one month earlier than the previous billing period, will be the basis for establishing charges.

In the last month of a billing period, IBM will review your usage of a Program and calculate a new Usage Pricing Charge, if appropriate. A new Usage Pricing Charge would apply at the start of the next billing period.

3. Determining the Usage Pricing Charge

The Government's monthly Usage Pricing Charge is determined by the monthly "Usage Level(s)". Usage Levels correspond to the Usage Range(s), specified in Appendix N which are determined by the Government's monthly usage (as reported by the usage measurement function IBM provides)

If the Government is using multiple versions (or copies) of a Program on a Machine, IBM will 1) use the aggregated usage provided on the Software Usage Report to represent the usage consumed by all the version (copies), and 2) apply this aggregate usage measurement to the charge applicable to the latest version of a Program installed on that Machine. At least one version of the Program must be listed on Appendix N as a Program for which Usage Pricing Charges by service units ("SUs") are available.

If the Government is using a Program in an actively coupled Parallel Sysplex environment, IBM will 1) aggregate the usage across all of the Machines in the Parallel Sysplex and 2) apply this aggregate usage to the charge applicable to the latest version of a Program installed on those Machines.

4. General

In determining the Government's usage of a Program, the earlier versions of which are already subject to Usage Pricing Charges, IBM will disregard measurements recorded during an applicable testing period, if any, if you so indicate on the Software Usage Report. If the Government adds a new version of a Program during a billing period, charges will be based on the charge for the latest version.

The charge for a Program will revert to the applicable recurring charge if the Government 1) fails to provide IBM the Software Usage Report within the specified time period or 2) at the end of a billing period, or the end of the Government's participation in this offering. In either event, the Government may not resume participation for that Program. If the Government wants to resume participation, the Usage Pricing Charge will be for 12 months based on the Software Usage Report provided to us for the preceding 12-month period. If a Program was terminated from participating in MULC for either of the above reasons, a 12-month period applies before the Program is eligible for Usage Pricing Charges.

5.16.11 SINGLE-VERSION CHARGING

The term "monthly charges" used herein means Monthly License Charges (MLC), Graduated MLC (GMLC), Parallel Sysplex License Charges (PSLC), Growth Opportunity License Charges (GOLC), Annual License Charges (ALC), zSeries Entry License Charges (zELC), Workload License Charges (WLC), and any other month recurring charge.

Single Version Charging (SVC) indicates that monthly, annual or processor group upgrade changes will be waived for a period of 12 months for this predecessor program only while in the process of migrating to the replacement program. When there is no replacement program

specified, if a replacement program becomes available, the predecessor program will then be eligible for SVC. Appendix I contains a listing of qualifying programs.

The waiver will start when charges become due on the replacement program. The replaced program must be operating on the same designated machine where the replacement program is in regular operation. Single Version Charging must be requested by the Government when ordering the new version. Monthly or processor group upgrade charges for a replaced program will commence or become due if the replaced program is operating on a different designated machine from the replacement program, if regular operation of the replacement program is terminated, or upon discontinuance of the replacement program.

Clarifications to SVC under aggregation and changes to SVC when operating under Sub-Capacity are as follows:

1. In the case where a machine is part of a sysplex, if the Government is actively migrating from a program to a designated replacement program on the one machine, all machines upon which the program runs in the sysplex may also have the replacement program licensed. These machines will be deemed as actively migrating for SVC purposes.

2. Licenses where the MSU utilization of the replacement program is less than the MSU utilization of the replaced program qualifies for SVC.

3. When the replaced program and the designated replacement program are eligible for Sub-Capacity pricing, the new MSU valuation for the replacement program is now based on a combination of MSU values. The final replacement program charge is based on the lower of 1) the sum of MSU values for both programs, and 2) a predetermined maximum value. The predetermined maximum values vary based on different configurations:

For versions of z/OS, use the full machines MSU capacity.

For programs other than versions of z/OS:

1. Where z/OS.e is not running on the machine, use the z/OS MSU value,

2. Where z/OS.e is running on the machine, use the sum of the z/OS MSU value and the MSU capacity of the engine(s) where z/OS.e is running.

When Full-Machine Capacity charges apply, charges for the replacement program are based on the MSU value at Full-Machine Capacity. For software programs in a sysplex where aggregation charges apply, the MSU value for each license is calculated as above per machine before totaling to calculate the aggregated MSU value. Standard aggregation rules apply.

The terms and conditions of this Special Item 132-33 remain in effect for the replaced product until the product is discontinued.

Single Version Charging is offered on mainframe software, for migration purposes only, and for a period not to exceed one year. Products in SVC status prior to 10/1/94 may remain in that status indefinitely provided migration activity is being pursued.

5.16.12 IBM SYSTEM Z9 WORKLOAD LICENSE CHARGES

Any Programs licensed in accordance with the terms herein that require z/Architecture (64-bit) hardware in order to execute properly may be licensed only to a Designated Machine that properly implements z/Architecture.

Definitions:

Eligible Machine	A Machine to which an Eligible Operating System is licensed. Any copies of Eligible Operating Systems that run on an Eligible Machine must run in z/Architecture (64-bit) mode. Eligible Machines are specified in Appendix M of this Schedule.
Eligible Operating Systems	Operating Systems specified in the Appendix.
Full Capacity MSUs	The total capacity of an Eligible Machine as specified in the Appendix.
Guest (LPAR)	z/TPF or z/OS when running under z/VM
MSUs	Millions of Service Units per hour. Units of Workload capacity of an Eligible Machine.
Native (LPAR)	z/TPF or z/OS when not running under z/VM
Operating System Family	An IBM operating system and the IBM middleware that runs under it. The applicable IBM operating systems are z/OS, z/TPF, and z/VSE V4 or higher.
Product LPAR Utilization Capacity	The highest number of MSUs utilized by the combined logical partitions (LPARs) in which a Variable Workload License Charges (VWLC) IBM Program runs concurrently during a Reporting Period. The number of MSUs is based on a 4-hour rolling average utilization.
PSLC Option	Parallel Sysplex License Charges available for selected IBM Programs which are used on an Eligible Machine and are running an Eligible Operating System. See Appendix L
Reporting Period	The period which begins on the second day of a month and ends on the first day of the following month.
Sub-Capacity Pricing	WLC for VWLC IBM Programs based on less than Full Capacity MSUs
Sub-Capacity Report	A report generated by the IBM-provided Sub-Capacity Reporting Tool. The tool analyzes System Management Facilities ("SMF") data and SCRT89 data and calculates the Product LPAR Utilization Capacity for most VWLC IBM Programs. The Sub-Capacity Report includes these calculations. The Government is required to submit the report to IBM only if Sub-Capacity Pricing is in effect.

WLC	Workload License Charges available for selected IBM Programs which are used on an Eligible Machine and are running under an Eligible Operating System. WLC allow for Sub-Capacity Pricing.

1. Charges

1.The Government has a choice of selecting either, if available, but not both. WLC or PSLC within an Operating System Family on an Eligible Machine that has an Eligible Operating System licensed to it. However,

(a) IBM Programs with charge types shown below, however, may be licensed to the same Eligible Machine as IBM Programs with WLC charges:

    i. New Application License Charges ("NALC")

    ii. System z New Application License Charges ("zNALC")

    iii. Select Application License Charges ("SALC")

    iv. Midrange Workload License Charges ("MWLC")

(b) once the Government selects WLC, the Government may not switch back to PSLC without prior IBM approval, which IBM may grant in its sole discretion; and

(c) WLC Programs and PSLC Programs may not be aggregated together for pricing purposes.

2. When Flat Workload License Charges ("FWLC") apply to IBM Programs, charges are a fixed monthly charge. z/OS must be licensed to the Eligible Machine, FWLC charges are not available on an Eligible Machine if any Program in the z/OS Operating System Family has PSLC charges.

3. When VWLC charges apply to IBM Programs:

  a. Monthly charges are based on the number of MSUs reported in the IBM Program's Sub-Capacity Report for the specified Eligible Machine during a Reporting Period. This value corresponds to the Product LPAR Utilization Capacity or, on a non-partitioned Eligible Machine, must equal the Full Capacity MSUs. If Sub-Capacity Pricing is not in effect, monthly charges are based on Full Capacity MSUs;

    NOTE: Information on IBM's billing process, including how to determine the applicable Reporting Period for a particular month's charges, can be found on the Sub-Capacity Corner website at http://www.ibm.com/zseries/swprice/subcap/

  b. Eligible Operating System licenses are charged at Full Capacity MSUs until IBM has processed the initial Sub-Capacity Report for that Eligible Operating System on that Eligible Machine, enabling Sub-Capacity Pricing for that Operating System Family.

  c. the initial monthly charge for a non-operating system license is based upon the applicable operating system MSUs.

  d. once Sub-Capacity Pricing has commenced for an Eligible Operating System on a Eligible Machine, if a VWLC IBM Program does not appear in a Sub-Capacity Report subsequent to its initial monthly charge, it will be charged at the minimum VWLC MSUs;

NOTE: IBM specifies minimum VWLC MSUs in its programming announcements;

e. If the Government elects to have Sub-Capacity Pricing for a VWLC IBM Program on an Eligible Machine, then the Government must have Sub-Capacity for all VWLC IBM Programs in that Operating System Family on that Eligible Machine;

f. VWLC features have the same MSUs as the Program;

g. when z/TPF is licensed to an Eligible Machine, the Sub-Capacity Reporting Tool calculates the number of MSUs for z/TPF IBM Programs running on it. See the Amendment for Calculation of z/TPF MSUs (INTC-7283) for further details;

h. when z/OS is licensed to an Eligible Machine, the Sub-Capacity Reporting Tool calculates the number of MSUs used across all of the z/OS LPARs in which each z/OS VWLC IBM Program ran during the Reporting Period as follows:

If z/OS is running in Native LPAR(s) …	and z/OS is running in Guest LPAR(s), at least one of which is at V1.6 or lower …	and z/OS is running in Guest LPAR(s), at least one of which is at V1.7 or higher …	then, MSUs are calculated in LPAR(s) in which the VWLC IBM Program ran, as follows:
Yes	Yes	Yes	The highest combined:
Yes	Yes	No	1. 4-hour rolling average utilization across all z/OS Native LPARs, and 2. the maximum capacity of all z/OS Guest LPARs
Yes	No	Yes	The highest combined 4-hour rolling average utilization across all z/OS Native LPARs and z/OS Guest systems
Yes	No	No	
No	No	Yes	
No	Yes	Yes	The highest combined maximum capacity of all z/OS Guest LPARs
No	Yes	No	

The Government may manage Native z/OS LPAR utilization by specifying an LPAR defined capacity on the Hardware Management Console ("HMC"). However, this is not required to obtain Sub-Capacity Pricing. If the Government chooses to specify the defined capacity for a particular Native z/OS LPAR, the Sub-Capacity Reporting Tool will use the lower of the specified capacity or the 4-hour rolling average in order to determine the number of MSUs associated with a VWLC IBM Program.

If an OS/390 or MVS operating system is licensed to the same Eligible Machine, then charges for the z/OS Operating System Family are based on Full Capacity MSUs

i. The capping function in z/OS is used to ensure the workload does not exceed the LPAR defined capacity Government has specified on a 4-hour rolling average. To achieve this, the capping function may automatically reduce and limit computer

resources to workloads running in that LPAR. By defining the LPAR capacity, the Government authorizes the capping function to cap the computer's resources as defined; and,.

    ii. Increase in any IBM System z Program VWLC charges, due to changes the Government makes in the MSU capacity for any Eligible Machine it is licensed to, will be in effect for a minimum period of one month.

4. When aggregated VWLC apply to IBM Programs, aggregated charges:

    a. Are available only for IBM Programs used on an Eligible Machine in a Parallel Sysplex.

    b. Are based on the sum of the MSUs on the Sub-Capacity Reports that the Government submits to IBM for each copy of an IBM Program installed on qualifying Eligible Machines in a Parallel Sysplex. If Sub-Capacity Pricing is not in effect, aggregated charges are based on Full Capacity MSUs.

    c. Require two or more Eligible Machines actively coupled using the applicable coupling links and Coupling Facility specified in the Appendix.

    d. To be actively coupled, the following criteria must be met:

        i. All Eligible Machines in the Parallel Sysplex must be physically attached via coupling links to a common Coupling Facility. In addition, time synchronization must be provided using either timer links to a common Sysplex Timer or coupling links transporting Server Time Protocol ("STP") timing information in an STP Coordinated Timing Network ("CTN").

        ii. If a Coupling Facility is divided into LPAR's, all Eligible Machines must be attached to the same Coupling Facility LPAR.

        iii. All Eligible Operating System images that comprise the Parallel Sysplex environment must have at least one common Systems Enablement Function, specified in the Appendix, activated to use the Coupling Facility across all images in the Parallel Sysplex.

        iv. The configuration and operating modes described herein must be the normal mode of operations for this environment.

        v. An Eligible Machine can only be in one Parallel Sysplex for pricing purposes. The Eligible Operating System images participating in the Systems Enablement Function(s) must account for at least 50 percent of the total Eligible Operating System workload on each Eligible Machine.

In the event there are two LPARs, each 50 percent of the total Eligible Operating System workload, connected to two Parallel Sysplexes, the Government may select which Parallel Sysplex the Eligible Machine will be included in for billing.

On an annual basis, upon IBM's request, the Government will provide IBM with a completed IBM Sysplex Verification Package

Note: Information can be found at http://ibm.com/zseries/swprice/sysplex/

Additional information regarding the technical aspects of Parallel Sysplex aggregation and detailed information on tools, processes, and procedures may be found at the Sysplex Aggregation website at the following URL: http://ibm.com/zseries/swprice/sysplex/

2. IBM's Responsibilities

IBM will:

1. Specify

   a. The Eligible Machines and their Full Capacity MSUs,

   b. The applicable Coupling Facilities

   c. Eligible Operating Systems

   d. Systems Enablement Functions, and

   e. The date and the process for transmitting Sub-Capacity Reports to IBM;

2. Provide the Sub-Capacity Reporting Tool;

3. Adjust VWLC in response to the changes the Government indicate on the Sub-Capacity Reports you submit; and

4. Register Eligible Machines when the Government submits the initial Sub-Capacity Reports.

3. Government's Responsibilities under Sub-Capacity Pricing

Government agrees to:

1. Promptly install any enabling code for IBM Programs or IBM System z Licensed Internal Code (LIC) required for Sub-Capacity Pricing;

2. Collect, and retain for a period of not less than six months, the SMF and SCRT89 data records for all LPARs, by Eligible Machine, required by the Sub-Capacity Reporting Tool for each Reporting Period;

3. Run the most current version of the Sub-Capacity Reporting Tool against the collected SMF and SCRT98 data to produce a Sub-Capacity Report. In addition, the Government agrees to specify the LPAR name(s) in the Sub-Capacity Report where any IBM Programs run for which SMF or SCRT89 data is not created. If there have been special circumstances during the Reporting Period, the Government may also provide alternate values, as defined in the SCRT Users Guide (SG24-6522), for each IBM Program with an explanation for the variance.

4. Send to IBM within the time specified in the Appendix,

   a. The initial Sub-Capacity Report that is based on the data for the entire initial Reporting Period for each Eligible Machine that the Government wishes IBM to register for Sub-Capacity Pricing; and

   b. Subsequent Sub-Capacity Reports that are based on the data for each entire Reporting Period thereafter, for each registered Eligible Machine.

Sub-Capacity Reports may not be used to order or discontinue licenses, move licenses between Eligible Machines, report Eligible Machine model upgrades, or enable or disable IBM Program features.

Both IBM and the Government agree that Sub-Capacity Reports that reflect a changed Product LPAR Utilization Capacity will be considered to be orders placed by you, and you authorize IBM to make any resulting billing increase or decrease. Sub-Capacity Reports not submitted by the "not later than" date specified in the Appendix will result in IBM Programs being charged on a full Capacity MSU basis for the Reporting Period;

The Government is responsible for monitoring funding allocated on their current Order or Contract and issuing Modifications whenever the result of increases and/or decreases in charges exceed such allocated funding. A Modification may also be required for line item changes, if required by the ordering agency. The Government is responsible for paying invoices for all monthly usage.

5. Configure the Government's Machine to send weekly to IBM Transmit System Availability Data ("TSAD") weekly to IBM via the Remote Support Facility ("RSF"). This enables IBM to verify that the Product LPAR Utilization Capacity MSUs in the Sub-Capacity Reports submitted to IBM are consistent with the Government's actual Machine configuration. An alternate means for the Government to collect and transmit this data is provided in the "z/OS Planning for Sub-Capacity Pricing" publication. Failure to submit TSAD may result in IBM Programs being charged on a Full Capacity MSU basis;

6. Assign a person in Government's organization with authority to discuss and promptly resolve any questions on Sub-Capacity Reports or inconsistencies between Sub-Capacity Report contents or current license entitlement, and configuration data reported via the RSF; and

7. Notify IBM if the Government elects to convert from Sub-Capacity Pricing to WLC at Full Capacity MSUs.

8. The Sub-Capacity Reports must be transmitted to IBM on the second, but not later than the ninth, calendar day of the month. The e-mail address for transmitting the Reports is fednotes@us.ibm.com.

5.16.13 EWLC, TWLC, zELC AND Z/OS.E LICENSE CHARGES

The terms and conditions are for Programs running on an Eligible Machine including terms for z/OS.e and Programs with zSeries Entry License Charges ("zELC")), Entry Workload License Charges ("EWLC"), or Tiered Workload License Charges ("TWLC"). When running on an Eligible Machine z/TPF, z/OS or z/OS.e must be running in z/Architecture (64-bit) mode.

1. Definitions

Eligible Machines – A Machine to which an Eligible Operating System is licensed. Any copies of Eligible Operating Systems that run on an Eligible Machine must run z/Architecture (64-bit) mode. Eligible Machines are specified in Appendix O.

Eligible Operating systems – An Operating System specified in Appendix O

Full Capacity – EWLC pricing of Programs based on the total MSUs of the Eligible Machine

Full Logical Model Capacity - The total MSU capacity of the Logical Model.

Guest (LPAR) – An Eligible Operating system when running on z/VM

MSUs - Millions of Service Units per hour. Units of Workload of a z890 or z800.

Native (LPAR) – An Eligible Operating System running on z/VM

Operating System Family – An IBM operating system and the IBM middleware that runs under it. The applicable IBM operating systems are z/OS, z/TPF, and z/VSE V4 or higher.

Product LPAR Utilization Capacity - The highest number of MSUs utilized by the combined logical partitions ("LPARs") in which an EWLC IBM Program runs concurrently during a Reporting Period. The number of MSUs is based on a 4-hour rolling average utilization.

Reporting Period - The period which begins on the second day of a month and ends on the first day of the following month.

Sub-Capacity - EWLC pricing of Programs based on less than the total MSUs of the Eligible Machine.

Sub-Capacity Report - A report generated by the IBM-provided Sub-Capacity Reporting Tool. The tool analyzes System Management Facilities ("SMF") data and SCRT89 data and calculates the Product LPAR Utilization Capacity for most EWLC IBM Programs. The Sub-Capacity Report includes these calculations. The Government is required to submit the report to IBM only if Sub-Capacity pricing is in effect.

System z9 and zSeries Software ContractsWebsite -
http://www.ibm.com/zseries/library/swpriceinfo/

2. LPAR Limitations – The Government may not use more than 15 LPARs on a zSeries 890 Capacity Setting 110

3. Charges for Program running on an Eligible Machine:

A. Logical Models
For determining the basis for certain software license charges, an Eligible Machine may be divided into two Logical Models, one running z/OS.e and the other running some other operating system(s). If the Eligible Machine is running only z/OS.e or is not running z/OS.e, then there is only one Logical Model and it is equal to the physical Eligible Machine model. (Note: Integrated Facility for Linux ("IFL") engines are not part of Logical Models or the physical Eligible Machine model.)

Logical Models may be calculated as follows

a. If the only charges for Programs on an Eligible Machine are zELC, a table illustrating the various Logical Model combinations may be found in the Appendix.

b. If an Eligible Machine is running a combination of z/OS.e with EWLC charges and some other operating system, the following steps are used to calculate the Logical Model:

a. The Government advises IBM of planned MSUs:

Within 30 days of the billing period start date for EWLC charges, the Government will advise IBM of the planned MSUs usage for both z/OS.e and for the non-z/OS.e Logical Model. The total planned MSUs must equal the total MSU

capacity of the Eligible Machine. To determine the total MSU capacity of each model of an Eligible Machine, see the System z9 and Series Software Pricing Website.

b. IBM to calculate Logical Model sizes:

1. IBM will calculate the Logical Model sizes for zELC Programs by selecting the Logical Model with an MSU rating that equals the Government's planned z/OS.e MSU usage, or the next higher Logical Model if you planned z/OS.e MSU usage exceeds the MSU rating for a Logical Model. IBM will similarly calculate the non-z/OS.e Logical Model using non-z/OS.e MSUs.

2. IBM will calculate the appropriate tier for TWLC programs based upon the Government's planned z/OS.e MSU usage. IBM will similarly calculate the non-z/OS.e tier using the non-z/OS.e MSUs.

c. Changing Logical Models sizes:

If an Eligible Machine is upgraded or downgraded, or if the Government changes the MSUs used for z/OS>e, the Government will be advise IBM of the new planned MSUs for both z/OS.e and non-z/OS.e. IBM will adjust the Logical Model accordingly.

d. If MSU usage is greater than the total MSU capacity of the Eligible Machine:

In the event actual MSUs reported on a Sub-Capacity Report for both the z/OS.e and non-z/OS.e Logical Models exceed the total MSU capacity of the Eligible Machine, IBM will reduce the z/OS.e MSUs so that the total MSUs do not exceed the total MSU capacity of the Eligible Machine. However, the z/OS.e MSUs may not be reduced below 3 MSUs. If necessary, the non-z/OS.e MSUs will also be reduced so the total MSU capacity of the Eligible Machine is not exceeded.

This calculation will not impact zELC charges, only EWLC charges.

e. Actual MSU use exceeds planned MSUs provided to IBM:

If the Sub-Capacity Report shows that actual non-z/OS.e MSU usage exceeded the planned MSU usage that the Government provided to IBM, IBM may adjust the size of the Logical Models accordingly. Both IBM and the Government agree that this will result in a billing increase and the Government agrees to pay such revised charges.

The Government is responsible for monitoring funding allocated on their current Order or Contract and issuing Modifications whenever the result of an increase in charges exceed such allocated funding. A Modification may also be required for line item changes, if required by the ordering agency. The Government is responsible for paying invoices for all monthly usage.

c. If the charges on an Eligible Machine are either aggregated Variable Workload License Charge ("VWLC") or aggregated Parallel Sysplex License Charges ("PSLC"), and a Program is running on only one of the Logical Models, the Full Logical Model Capacity for each Logical Model is defined as follows:

a. For a Program running in the Logical Model with z/OS.e:

1. Divide the total number of MSUs in the Eligible Machine by the number of engines in that Eligible Machine;

2. multiply that result by the number of engines in the Logical Model;

3. if the result is not a whole number, any fraction equal to or greater than one-half is rounded up to the next whole number. Otherwise, fractions are dropped.

  b. For a Program running in the Logical Model without z/OS.e, subtract the MSUs calculated above from the total MSUs in the Eligible Machine.

B. z/OS.e Charges

  z/OS.e charge are based on the number of engines in the Logical Model in which z/OS.e runs or on EWLC charges.

C. Aggregated Charges

  a. Aggregated PSLC may apply if the Eligible Machine is coupled in a Parallel Sysplex that has aggregated PSLC charges. Usage Pricing Charges may apply

  b. Aggregated Workload License Charges ("WLC") may apply if the Eligible Machine is coupled in a Parallel Sysplex that has aggregated WLC charges.

  c. Prerequisite terms within Workload License Charges (WLC) and Parallel Sysplex License Charges (PSLC) Items, and applicable Appendices apply.

D. zELC Charges

  a. zELC charges are based on the category of the Logical Model.

  b. zELC charges are available for selected Programs used on Eligible Machines that are identified in the "Group" column by "zELC", followed by the zELC category, on the System z9 and zSeries Software Contracts Website.

  c. When zELC charges are not available for certain Programs, a default charge applies . It is specified on the System z9 and zSeries Software Contracts Website for each applicable Eligible Machine in the column called "Other".

  d. If the Government selects zELC charges for any Program on an Eligible Machine, then all Programs for which zELC charges are available must have zELC charges, unless EWLC charges are available for selected Programs. In this case those Programs may have EWLC charges.

  e. Increases in any zELC or default charges for Programs, due to changes in the category or model placement for any machine to which the Programs are licensed, will be in effect for a minimum of one month

E. TWLC Charges

TWLC charges are a tiered EWLC price structure and based on Full Logical Model Capacity. Sub-Capacity pricing is not available.

a. TWLC charges are available for selected Eligible Programs used on non-aggregated Machines identified in the "Group" column by "TWLC" followed by the TWLC tier on the System z9 and zSeries Software Contracts Website.

b. When TWLC charges are not available for certain programs, a default charge applies. It is specified on the System z9 and zSeries Software Contracts Website for each applicable Eligible Machine in the column call "Other."

c. If the Government selects TWLC charges for any Program on an Eligible Machine, then all Programs for which TWLC charges are available must have TWLC charges, unless EWLC charges are available for selected Programs. In this case those Programs must have EWLC charges. However, if the Government elects Midrange Workload License Charges ("MWLC") on z/VSE V4 then all Programs with MWLC available must have MWLC charges.

d. Increases in any TWLC or default charges for Programs, due to changes in the tier placement for any Eligible Machine to which the Programs are licensed, will be in effect for a minimum of one month.

F. EWLC Charges:

a. EWLC charges are based on Full Capacity or Sub-Capacity pricing.

b. EWLC charges are available only for selected Programs used on non-aggregated Eligible Machines that are identified in the "Group" column by "EWLC" on the System z9 and zSeries Software Contracts Website.

c. If you select EWLC charges for a Program on an Eligible Machine, then all Programs for which EWLC charges are available must have EWLC charges. All other Programs on an Eligible Machine must have zELC charges, if zELC charges are available, or TWLC charges, if TWLC charges are available. However, if the Government elects Midrange Workload License Charges ("MWLC") on z/VSE V4 then all Programs with MWLC available must have MWLC charges.

IBM Programs with Select Application License Charges ("SALC") may be licensed to the same Eligible Machine as IBM Programs with EWLC Charges. SALC is described in the Select Application License Charges terms elsewhere in this Chapter.

d. Full Capacity Pricing Terms: Increases in EWLC charges for Programs, due to changes in the model placement for any Eligible Machine to which the Programs are licensed, will be in effect for a minimum of one month.

e. Sub-Capacity Pricing Terms

(i) Sub-Capacity Charges:

1. New licenses are charged on a Full Capacity MSU's, and non-operating system licenses at the operating system MSUs, until IBM has processed the initial Sub-Capacity Report containing the applicable Program.

2. Monthly charges are based on the number of MSUs reported in the Program's Sub-Capacity Report for the specified Eligible Machine during the Reporting Period. This value corresponds to the Product LPAR Utilization

Capacity or must equal Full Capacity. If Sub-Capacity pricing is not in effect, monthly charges are based on the Full Capacity.

NOTE: Information on IBM's billing process, including how to determine the applicable Reporting Period for a particular month's charges, can be found on the Sub-Capacity Corner website at http://www.ibm.com/zseries/swprice/subcap/

Eligible Operating System licenses are charged at Full Capacity MSUs until IBM has processed the initial Sub Capacity Report for that Eligible Operating System on that Machine, enabling Sub-Capacity Pricing for that Operating System Family.

The initial monthly charge for a non-operating system license is based upon the applicable operating system MSUs.

3. Once Sub-Capacity Pricing has commenced for an Eligible Operating System on an Eligible Machine,, if an EWLC Program does not appear in a Sub-Capacity Report subsequent to its initial monthly charges, the Program will be charged at the minimum EWLC MSUs

NOTE: IBM specifies minimum EWLC MSUs in its programming announcements.

4. If the Government elects to have Sub-Capacity Pricing for any EWLC IBM Program on an Eligible Machine, then you must have Sub-Capacity Pricing for all EWLC IBM Programs in that Operating System Family on that Eligible Machine.

5. EWLC features have the same MSUs as the Program

6. When z/TPF is licensed to an Eligible Machine, the Sub-Capacity Reporting Tool calculates the number of MSUs for z/TPF Programs running on it. See the Amendment for Calculation of z/TPF MSUs (INTC-7283) for further details.

7. When z/OS or z/OS.e is licensed to a z890 or z800, the Sub-Capacity Reporting Tool calculates the number of MSUs used across all the z/OS and z/OS.e LPARs in which each EWLC Program ran during the Reporting Period as follows:

If z/OS or z/OS.e is running in Native LPAR(s) …	and z/OS or z/OS.e is running in Guest LPAR(s), at least one of which is at V1.6 or lower …	and z/OS or z/OS.e is running in Guest LPAR(s), at least one of which is at V1.7 or higher …	then, MSUs are calculated in LPAR(s) in which the EWLC IBM Program ran, as follows:
Yes	Yes	Yes	The highest combined
Yes	Yes	No	3. 4-hour rolling average utilization across all z/OS and z/OS.e Native

			LPARs, and 4. The maximum capacity of all z/OS and z/OS.e Guest LPARs
Yes Yes No	No No No	Yes No Yes	The highest combined 4-hour rolling average utilization across all z/OS and z/OS.e Native LPARs and z/OS and z/OS.e Guest systems
No No	Yes Yes	Yes No	The highest combined maximum capacity of all z/OS and z/OS.e Guest LPARs

The Government may manage Native z/OS or z/OS.e LPAR utilization by specifying the LPAR defined capacity on the Hardware Management Console ("HMC"). However, this is not required to obtain Sub-Capacity pricing. If the Government chooses to specify the defined capacity for a particular Native z/OS or z/OS.e LPAR, the Sub-Capacity Reporting Tool will use the lower of the specified capacity or the 4-hour rolling average in order to determine the number of MSUs associated with each EWLC Program

If an OS/390 or MVS operating system is licensed to the same Eligible Machines then charges for the z/OS Operating System Family are based on Full Capacity.

8. The capping function in z/OS or z/OS.e is used to ensure the workload does not exceed the LPAR defined capacity you have specified on a 4-hour rolling average. To achieve this, the capping function may automatically reduce and limit computer resources to workloads running in that LPAR. By defining the LPAR capacity, the Government authorizes the capping function to cap the computer's resources as defined.

(ii) IBM's Responsibilities:
IBM will:

a. Specify in Appendix O a) the Eligible Machine, and b? the date and the process for transmitting Sub-Capacity Reports to IBM;

b. Provide the Sub-Capacity Reporting tool;

c. Adjust EWLC in response to the changes the Government indicates on the Sub-Capacity Reports that the Government submits; and

d. Register Eligible Machines when the Government submits the initial Sub-Capacity Reports.

(iii) Government's Responsibility under Sub-Capacity Pricing:
The Government agrees to:

a. promptly install any enabling code for Programs or IBM System z Licensed Internal Code ("LIC") required for Sub-Capacity pricing

b. Collect, and retain for a period of not less than six months, the SMF and SCRT89 data records all LPARs, by Eligible Machine, required by the Sub-Capacity Reporting Tool for each Reporting Period;

c. Run the most current version of the Sub-Capacity Reporting Tool against the collected SMF and SCRT89 data to produce a Sub-Capacity Report where any IBM Programs run for which SMF or SCRT89 data is not created. If there have been special circumstances during the Reporting Period, the Government may also provide alternate values, as defined in the SCRT Users Guide (SG24-6522), for each Program, with an explanation for the variance;

d. Send to IBM within the time specified in Appendix O

i. The initial Sub-Capacity Report that is based on the data for the entire initial Reporting Period for each Eligible Machine that the Government wishes IBM to register for Sub-Capacity pricing; and

ii. Subsequent Sub-Capacity Reports that are based on the data for each entire Reporting Period thereafter, for each registered Eligible Machine.

Sub-Capacity Reports may not be used to order or discontinue licenses, move licenses between Eligible Machines, report Eligible Machine model upgrades, or enable or disable Program features.

Both IBM and the Government agree that Sub-Capacity Reports that reflect a changed Product LPAR Utilization Capacity may result in billing increase or decrease. The Government agrees to pay such revised charges. The Government is responsible for monitoring funding allocated on their current Order or Contract and issuing Modifications whenever the result of increases and/or decreases in charges exceed such allocated funding. A Modification may also be required for line item changes, if required by the ordering agency. The Government is responsible for paying invoices for all monthly software charges. Sub-Capacity Reports not submitted by the "not later than" date specified in the Appendix will result in Programs being charged on a Full Capacity basis for the Reporting Period;

e. configure your Eligible Machine to send Transmit System Availability Data ("TSAD") weekly to IBM via the Remote Support Facility ("RSF"). This enables IBM to verify that the Product LPAR Utilization Capacity MSUs in the Sub-Capacity Reports you submit to IBM are consistent with your actual Machine configuration. An alternate means for you to collect and transmit this data is provided in the "z/OS Planning for Sub-Capacity Pricing" publication. Failure to submit TSAD may result in Programs being charged on a Full Capacity basis;

f. assign a person in your organization with authority to discuss and promptly resolve any questions on Sub-Capacity Reports or inconsistencies between Sub-Capacity Report contents or current license entitlement, and configuration data reported via the RSF; and

g. notify IBM if the Government elect to convert from Sub-Capacity Pricing to EWLC at Full Logical Model Capacity.

G. GOTC Charges (Graduated One-Time Charges)

(a) Programs for which the Government has paid GOTC may be moved to an Eligible Machine

(b) Upgrade charges will apply if the Eligible Machine "Default Model Group" specified in the Appendix or the zSeries Software Pricing Website is higher than the current GOTC entitlement. Refunds do not apply if the z800 Default Model Group is lower.

(c) Contact IBM for special pricing if the GOTC license is being moved to an Eligible Machine whose applicable default charge is based on MSUs rather than a specific Default Model Group.

4. Additional License Terms for z/OS.e

1. The Government may run z/OS.e only on Eligible Machines.

2. The Government must run z/OS.e in Logical Partition ("LPAR") that has "z/OSE" as the first four characters of the LPAR name.

3. The Government must execute z/OS.e in z/Architecture (64-bit) mode.

4. The Government must order and license z/OS.e for the number of engines in the Logical Model in which you will run z/OS.e, or alternatively, z/OS.e may be ordered with EWLC charges.

5. The Government may use only the levels of Language Environment (LE), JES2 and JES3 that are delivered with z/OS.e.

6. The Government may not run any of the following z/OS.e base elements, optional features, or functions:

a. BookManager READ

b. BookManager BUILD feature

c. GDDM

d. GDDM-PGF feature

e. GDDM-REXX feature

f. DCE Application Support

g. LANRES

h. Bulk Data Transfer (BDT) File-to-File feature

i. Language Environment's use of Run-time Library Services (RTLS)

j. Language Environment Routine Retention (LRR)

k. Language Environment Compatibility Preinitialization for C and PL/I

l. Encina Toolkit Executive

m. MICR/OCR

     n. Communications Server Network Print Facility (NPF) feature

7. The Government may not run any of the following under z/OS.e:

    a. CICS, IMS, FORTRAN, or COBOL applications. However, you may run precompiled COBOL DB2 stored procedures and other precompiled COBOL applications using the Language Environment pre-initialization interface (CEEPIPI). You may also use DB2, CICS and IMS Connectors to access existing z/OS or OS/390 systems or an application server on Linux for zSeries. Hipersockets may be used as long s they access LPARs or IFLs on the same Eligible Machine.

    b. COBOL, FORTRAN, PL/I or Visual Age PL/I compilers. However, you may execute precompiled PL/I and Visual Age PL/I applications.

    c. DB2 QMF Host feature, DB2 QMF HPO feature.

    d. The Government may not have more than eight concurrent TSO users under z/OS.e.

    e. The Government may not run any operating system other than z/OS.e, z/VM V4, z/VM V5 and LINUX in the z/OS.e Logical Model. Such operating systems include, for example, z/OS, OS/390, MVS, VM (prior to z/VM V4), VSE, z/VSE, TPF, z/TPF, etc.

    f. The Government agrees to configure your Eligible Machine to send Transmit System Availability Data ("TSAD") to IBM weekly via the Remote Support Facility ("RSF"). This enables IBM to verify that your z/OS.e license matches your actual Eligible Machine configuration. An alternate means for you to collect and transmit this data is provided in the "Hardware Management Console Operations Guide" publication.

5. Programs that run on an IFL

    a. Programs that run on an IFL engine may be licensed under the terms of the agreement provided with them.

    b. Charges for Programs that IBM has announced as eligible to run on IFL engines are based on the total number of IFL engines installed on an Eligible Machine.

    c. If a Program runs on the IFL engine(s) and on the engine(s) of one or both of the Logical Models, the charges are based on the total of the IFL engines and the engines in the Logical Models where the Program runs.

5.16.14 SELECT APPLICATION LICENSE CHARGES FOR IBM SYSTEM ZUSAGE PRICING CHARGES

The terms of Select Application License Charges for IBM System z Usage Pricing Charges ("Amendment") modifies and is made a part of the terms for IBM System z Usage Pricing Charges, and associated Appendices apply to Select Application License Charges ("SALC") terms, except in the case of a conflict, in which case the terms stated herein prevail. In addition, terms in Appendix P also apply to Select Application License Charge software. Any Programs licensed in accordance with the terms of this Amendment may be licensed only to a Designated Machine that properly implements 64-bit z/Architecture.

1. SALC Eligible Programs and Measurements

The following supersedes Appendix N for IBM System z Usage Pricing Charges Programs for which SALC is available are at listed at http://www.ibm.com/zseries/library/swpriceinfo/ Click on "Usage Pricing Charges and Select Application License Charges"

    1. SALC requires z/OS. In addition, Workload License Charges ("WLC") or Entry Workload License Charges ("EWLC") must be in effect on the same machine.

    2. Usage Levels and ranges for SALC Programs:

Usage Level	Usage Range in MSUs (CPU SUs in millions)
Base 1	1.00
Level A	2.00 - 11.00
Level B	12.00 - 44.00
Level C	45.00 - 78.00
Level D	79.00+

Pricing for usage less than or equal to one MSU requires the Base 1 feature, while usage above one MSU requires the Base 1 feature plus the appropriate number of Level A, B, C and D features. For charging purposes, reported usage is rounded up to the nearest whole MSU.

2. Transitioning from Usage Pricing

The highest monthly usage, derived from the preceding Usage Pricing Charge billing period (including one month before that billing period and excluding the final month of the billing period), will be used to determine your monthly SALC charge when transitioning a Program under Usage Pricing to SALC charges.

5.16.15 IBM SYSTEM Z PROGRAMS SUB-CAPACITY PRICING

These terms modify or are in addition to the IBM Program License Agreement ("IPLA").

Subject to the terms herein for IBM System z Sub-Capacity Pricing ("Amendment"), IBM enables the Government to obtain Sub-Capacity Pricing for certain System z IPLA Programs ("Eligible Programs"). Eligible Programs are specified at http://www.ibm.com/zseries/library/swpriceinfo/. (*Click on " Sub-Capacity zSeries IPLA Programs."*).

These terms supersede any subcapacity terms offered for Eligible Programs in their License Information or other agreements.

If there is a conflict between the terms stated herein and those of the IPLA, these terms will prevail.

Eligible Programs Running in a Workload License Charges ("WLC") Environment

The following sections of these terms, and the terms of System z Workload License Charge (Item 5.16.11 of the GSA IT Schedule) apply to the Eligible Programs, as if they were Variable Workload License Charge ("VWLC") Programs with Sub-Capacity Pricing, and are incorporated by reference into this Amendment with modifications as indicated:

Section 3 - Your Responsibilities under Sub-Capacity Pricing *with the following modification:*

Subsection 4: *The phrase* "you authorize IBM to make any resulting billing increase or decrease" *in the sentence that begins with* "Both IBM and the Government agree that Sub-Capacity Reports..." *is replaced by* "you authorize IBM to make any resulting billing increase."

1. Eligible Programs Running in an Entry Workload License Charges ("EWLC") Environment

The following sections of the terms for EWLC, TWLC, zELC and z/OS.e License Charges (Item 5.16.13 of the GSA IT Schedule) apply to the Eligible Programs, as if they were Entry Workload License Charge ("EWLC") Programs with Sub-Capacity Pricing, and are incorporated by reference into this Amendment with modifications as indicated:

Subsection entitled Government's Responsibility under Sub-Capacity Pricing *with the following modification:,*

Item (iii)(d): *The sentence* "Both IBM and the Government agree" *is replaced by* "You authorize IBM to make any resulting billing increase, and agree to pay such revised charges."

2. Additional Definitions

1. Environment: Standalone machine or Parallel Sysplex

2. Execution-Based Terms:

Execution-Based licensing terms apply to Eligible Programs whose value is based on the capacity of the execution (run-time) Environment. The capacity of an Eligible Program with Execution-Based terms must equal the capacity of the LPAR(s) where it executes.

   (a) Reference-Based licensing terms apply to Eligible Programs that add value to particular monthly license charge (MLC) Programs. The capacity of an Eligible Program with Reference-Based terms must equal the capacity of the applicable MLC Program. This MLC Program is called the "Parent Program."

   (b) Eligible Programs with Reference-Based terms add value to the Parent Program across the Environment, regardless of where in the Environment the Programs executes.

   (c) When an Eligible Program with Reference-Based terms is used in a qualified Parallel Sysplex (described in the WLC or EWLC Attachment), the capacity of the Eligible Program must be equal to the capacity of the Parent Programs across the Parallel Sysplex.

   (d) Where there are multiple versions of the Parent Program licensed in the Environment, the IPLA charges will be based on the total billable MSUs of the Parent Programs, but capped at the Parent Programs' z/OS MSU capacity.

3. z/OS-Based Terms:

z/OS-Based licensing terms apply to Eligible Programs that provide value to the particular Machine where the Program is used. The capacity of a Eligible Program with z/OS-Based Terms must equal the capacity of z/OS on that Machine.

3. Qualifications

1. You must have executed WLC or EWLC terms, as applicable.

2. You must agree to keep IBM informed of the type, model, and serial number of each Machine on which each Eligible Program is executing. The scope of your tracking extends to all Machines in your Agency or Department within your Agency, whether the Eligible Programs have Sub-Capacity or Full Capacity charges. If you are unwilling or unable to fulfill your tracking responsibilities, IBM may terminate this contract upon 30 days written notice. In such event Full Capacity terms would apply.

3. If you have Eligible Programs with Execution-Based or z/OS-Based terms, you must have selected Sub-Capacity Pricing for VWLC or EWLC, as appropriate, on the Machine where the Eligible Program is being used.

4. If you have Eligible Programs with Reference-Based terms, you must have selected Sub-Capacity Pricing for VWLC or EWLC, as appropriate, for the Parent Program(s). Full Capacity MSUs will apply for any machine(s) where the Parent Program is not in Sub-Capacity mode.

5. z/OS or z/OS.e must run in z/Architecture (64-bit) mode.

6. OS/390 and MVS may not be licensed to a Machine with Sub-Capacity Pricing.

7. For specific Machine qualifications, see http://ibm.com/zseries/library/swpriceinfo/. See Machines with "WLC" in the WLC column or "EWLC" in the Group column.

8. Monthly Sub-Capacity reports, generated by the Sub-Capacity Reporting Tool ("SCRT"), must be submitted to remain eligible for Sub-Capacity pricing.   SCRT terms are described in the WLC and EWLC terms. (NOTE: In the event you are unable to submit your SCRT Report by the ninth calendar day of the month, you must email scrt@us.ibm.com by the ninth calendar day to request an extension.

9. In the event of an unusual situation, you have the opportunity to override the MSU values on the SCRT Report(s) prior to submission. You must provide an explanation for each override.

10. Sub-Capacity terms may not be transferred to third parties.

4. Charges

1. One-time charges are based on the number of MSUs defined in the SCRT Report during a Reporting Period. This value corresponds to the Product LPAR Utilization Capacity of the Eligible Programs with Execution-Based or z/OS-Based terms or the Parent Program, as applicable. If Sub-Capacity Pricing is not in effect, one-time charges are based on Full Capacity MSUs or Full Logical Model Capacity, as appropriate.

    NOTE: Information on IBM's billing process, including how to determine the applicable Reporting Period for a particular month's charges, can be found on the Sub-Capacity Corner website at http://www.ibm.com/zseries/swprice/subcap/.

2. For native z/OS LPARs, the number of MSUs associated with an LPAR is equivalent to the highest observed rolling 4-hour average utilization in a Reporting Period. You may manage

native z/OS LPAR utilization by explicitly specifying the defined capacity of the LPAR(s) on the Hardware Management Console ("HMC"). This, however, is not required to obtain Sub-Capacity Pricing benefits.

3. If you choose to specify the capacity of the LPAR(s), the SCRT will use the lower of the specified capacity or the 4-hour rolling average utilization in order to determine the Product LPAR Utilization Capacity for each Program.

4. For non-native z/OS LPARs (i.e., z/OS guests of VM), the number of MSUs associated with an LPAR is equivalent to the maximum potential MSU capacity of that LPAR.

5. The capping function in the Eligible Operating System is used to ensure the workload does not exceed the LPAR defined capacity you have specified on a rolling four hour average. To achieve this, the capping function may automatically reduce and limit computer resources to workloads running in that LPAR. By defining the LPAR capacity, you authorize the capping function to cap the computer's resources as defined.

6. If Sub-Capacity Pricing is not in effect, aggregated charges are based on Full Capacity MSUs or Full Logical Model Capacity, as appropriate.

When any of the above conditions are not met, then the Eligible Program no longer qualifies.

The Government is responsible for monitoring funding allocated on their current Order or Contract and issuing Modifications whenever the result of increases and/or decreases in charges exceed such allocated funding. A Modification may also be required for the line changes, if required by the ordering agency. You authorize IBM to make any resulting billing increase, including S&S, if applicable, and agree to pay invoices for all such charges.

IBM does not give credits or refunds for charges already due or paid if an the applicable Product LPAR Utilization Capacity falls below the then current authorized entitlement.

5. IBM's Responsibilities

1. IBM will provide the following on the SCRT website (http://ibm.com/zseries/swprice/scrt/):

   a. The SCRT, which is at no charge. (NOTE: Written notification of updates will be sent by email)

   b. the e-mail addresses for transmitting SCRT Reports and Notification of Changes to IBM

2. IBM will calculate the applicable MSUs for Eligible Programs with Reference-Based or z/OS-Based terms, by using the MSUs of the Parent Program(s) or z/OS, as applicable, from the SCRT Report(s).