FR-399 Qualified High Technology Companies

The Technology Sector Enhancement Act of 2012 (A19-0513) has made several changes in the qualification requirements, treatment of capital gains and applicable tax rates regarding Qualified High Technology companies. Changes have been made to the instructions and the forms, but you are advised to consult the new law to determine the impact on your company.

A Qualified High Technology Company (QHTC) is one which –

a) Is an individual or entity organized for profit;
b) Maintains an office, headquarters, or base of operations in DC;
c) Has 2 or more employees in the District of Columbia;
d) Derives at least 51% of its gross revenue from one or more of certain “permitted” activities* (DC Code Sec. 47-1817.01(5)(A)(iii));
e) Does not derive 51% or more of its gross revenue from operating a retail store or electronic equipment facility in DC;
f) Is registered with the DC Government as a business in DC; and

g) Is current in all DC Government filing requirements and payment obligations.

If the accounting method used does not readily permit the verification of revenue for use in determining the status of a corporation as a QHTC, the corporation may petition for, or the Chief Financial Officer may use a cost of performance method described in DC Code §47-1817.01a(b).

Permitted Activities include —

• Internet-related services and sales including website design, maintenance, hosting, or operation;
• Internet-related training, consulting, advertising, or promotion services; the development, rental, lease, or sale of Internet-related applications, connectivity, or digital content; or products and services that may be considered e-commerce;
• Information and communication technologies, equipment and systems that involve advanced computer software and hardware, data processing, visualization technologies, or human interface technologies, whether deployed on the Internet or other electronic or digital media;
• Advanced materials and processing technologies that involve knowledge-based control systems and architectures; advanced fabrication and design processes, equipment and tools; or propulsion, navigation, guidance, nautical, aeronautical and astronautical ground and air-borne systems, instruments and equipment; and
• Electronic and photonic devices and components for use in producing electronic, optoelectronic, mechanical equipment and products of electronic distribution with interactive media content.

*(See pages 27 and 28 for an expanded list of permitted activities.)

TAX BENEFITS

The various DC tax credits and other tax benefits available to a QHTC are –

Tax Credits for:
• Costs of retraining qualified disadvantaged employees;
• Wages paid to qualified disadvantaged employees (corporations only);
• Wages paid to qualified employees (corporations only); and
• Payments for or reimbursements of employee relocation costs (corporations only).

Other DC Tax Benefits:
• Exemption from sales and use tax;
• Reduction of the corporate franchise tax rate;
• Partial exemption from the personal property tax;
• Exemption for 5 years from the DC corporate franchise tax;
• Deduction for Internal Revenue Code (IRC) section 179 expenses (up to $40,000);
• Deductions for leasehold improvements made by a QHTC tenant
• Rollover (deferral) of certain capital gains; and
• Reduction in Real Property Tax.

Claiming QHTC Tax Benefits

To be eligible to claim a tax credit or any of the other tax benefits available under the Act you must attach a QHTC-CERT form to the appropriate DC tax form: D-20; D-30; or FP-31. The QHTC-CERT form is a certification that you meet all of the conditions required of a QHTC. If the certification is not made in good faith a penalty may be imposed. Note: If the QHTC oval on the filed return is not filled in and the QHTC-CERT is not attached, QHTC status will not be recognized.

TAX CREDITS AVAILABLE TO QHTCs

Retraining Costs for Qualified Disadvantaged Employees (refundable credit)
Wages Paid to Qualified Disadvantaged Employees (nonrefundable credit – corporations only)

I. A Qualified Disadvantaged Employee is:

a) A DC resident and
b) A recipient of Temporary Assistance for Needy Families (TANF); or
c) A recipient of TANF in the period immediately preceding employment; or
d) A person released from incarceration within twenty four months before the date of employment by a QHTC; or
e) An employee hired, or relocated to DC, after December 31, 2000, and for whom a QHTC is eligible to claim the Welfare to Work Tax Credit or the Work Opportunity Tax Credit under IRC sec. 51.

*
The term “qualified disadvantaged employee” does not include:

a) A temporary or seasonal employee; or
b) An employee employed as the result of:
   1) The displacement of another employee;
   2) A strike or lockout;
   3) A layoff in which other employees are awaiting recall;
   4) A reduction of the regular wages, benefits, or rights granted to other employees in similar jobs; or
   5) A key employee.

Retraining Expenses

For years beginning after December 31, 2000, a QHTC may claim a credit against its DC corporate franchise tax for expenses paid or incurred during the taxable year for retraining qualified disadvantaged employees. This dollar limited credit may be taken as a refundable credit for up to 50 percent of any unused portion in the year incurred or it may be carried forward for 10 years. For corporate filers this and other QHTC credits are taken on a Form D-20CR filed with the Form D-20 and the Form QHTC-CERT.

Noncorporate business filers eligible to claim the retraining credit may do so by filing Form FR-332, Claim for Refund of Retraining Costs, (together with a copy of the Form QHTC-CERT and Forms D-30 and D-30CR).

Expenditures eligible for tax credit and paid by a QHTC to retrain a qualified disadvantaged employee are:

a) Tuition, costs, or fees for credit or noncredit courses leading to academic degrees or certification of professional, technical, or administrative skills taken at a District-based, accredited college or university;
b) The cost of formally enrolling in training programs offered by non-profit training providers (including community or faith-based organizations) certified for providing training, or job-readiness preparation at skill levels suitable for immediate performance of entry-level jobs that are pre-qualified by the DC Department of Employment Services and which are in demand among technology companies in general, and among information and telecommunications companies in particular;
c) Eligible training programs, other than those at a District-based accredited college or university, which are pre-qualified by the DC Department of Employment Services;
d) Worker retraining programs taken through an apprenticeship agreement approved by the DC Apprenticeship Council.

Limitations on the retraining tax credit

The retraining credit is limited to $20,000 for each qualified disadvantaged employee during the first 18 months of employment. If the amount of this credit exceeds the tax otherwise due from a QHTC, the unused amount of the credit may be carried forward but not beyond the tenth year following the first year the taxpayer files a return claiming the credit. The QHTC may also elect to take a refundable credit in an amount equal to fifty percent of the unused credit with no carryover to subsequent years.

II. Wages Paid to Qualified Disadvantaged Employees

A corporate QHTC is allowed a credit against its DC corporate franchise tax equal to fifty percent of the wages paid to a qualified disadvantaged employee, during the first 24 calendar months of employment.

This credit will not be allowed if:

a) the QHTC grants the qualified employee lesser benefits or rights than it grants other employees in similar jobs; or
b) the qualified employee was employed as the result of:
   1) The displacement of another employee;
   2) A strike or lockout;
   3) A layoff in which other employees are awaiting recall;
   4) A reduction of the regular wages, benefits, or rights granted to other employees in similar jobs; or
   5) The employee is a key employee.

Limitations on the credit for wages paid to qualified disadvantaged employees

The credit is limited to $15,000 per year for each qualified disadvantaged employee.

If the amount of the wages credit exceeds the DC corporate franchise tax due from a QHTC, the unused credit may be carried forward but not beyond the tenth year following the first year the taxpayer filed a return claiming the credit.

III. Wages Paid to Qualified Employees

For taxable years beginning after December 31, 2000, a corporate QHTC may claim a credit against its DC corporate franchise tax in an amount equal to ten percent of the wages paid to a qualified employee hired in the District after December 31, 2000 and employed by it in DC in any of the listed permitted activities.

The credit will not be allowed if:

a) The QHTC grants the qualified employee lesser benefits or rights than it grants other employees in similar jobs; or
b) The qualified employee in the District was employed as the result of:
   1) The displacement of another employee;
   2) A strike or lockout;
   3) A layoff in which other employees are awaiting recall;
   4) A reduction of the regular wages, benefits, or rights granted to other employees in similar jobs; or
   5) The employee is a key employee.

Limitations on the tax credit for wages paid to qualified employees

The wages must be paid during the first 24 calendar months of employment.

If the amount of the credit exceeds the DC corporate franchise tax due from the QHTC the unused amount may be carried forward but not beyond the tenth year following the first year.
the taxpayer filed a return claiming the credit.

The credit may not exceed $5,000 in a taxable year for each qualified employee.

IV. Relocation Costs

For taxable years beginning after December 31, 2000, a corporate QHTC may claim a credit against its DC corporate franchise tax for each dollar reimbursed to or paid on behalf of each qualified employee for the cost of relocating the employee to DC. This credit is not available if the relocation costs are claimed as a deduction by the corporation.

Qualified Employee

A qualified employee is a person employed in DC by a QHTC for 35 hours or more per week in any of the permitted activities.

The relocation credit is not allowed:

a) Until the QHTC relocates at least two qualified employees from employment outside DC to employment in DC;
b) Until the QHTC has employed the qualified employee for at least six months in DC in a permitted activity;
c) If the qualified employee works less than 35 hours per week;
d) If the QHTC has claimed a deduction for the relocation costs; or
e) If the employee is a Key Employee.

If the amount of the relocation credit allowable exceeds the DC corporate franchise tax otherwise due from a QHTC, the unused amount of the credit may be carried forward but not beyond the tenth year following the first year the taxpayer filed a return claiming the credit.

Which Relocation Costs Qualify?

Qualifying relocation costs include amounts paid by a corporate QHTC to a qualified employee for reimbursement of:

a) Moving expenses as defined in IRC section 217(b)(1); and
b) Financial assistance in purchasing a residence, in paying a security deposit or in procuring a one-year lease for a residence in DC. The commencement date of the employee’s move or financial assistance must be after December 31, 2000. Only costs related to one relocation per qualified employee are allowed.

Limitations on the tax credit for relocation costs

This credit may not exceed –

a) $5,000 for each employee who relocates his/her employment to DC but does not relocate his/her principal residence to DC. The total annual credit taken by a QHTC may not exceed $250,000.
b) $7,500 for each employee who relocates his/her employment to DC and who also relocates his/her principal residence to DC. The total annual credit taken by a QHTC may not exceed $1,000,000.

Principal residence is determined as of the last day of the first six months of employment in DC by a QHTC.

If the amount of the credit exceeds the DC corporate franchise tax liability, the unused amount may be carried forward but not beyond the tenth year following the first year the taxpayer filed a return claiming the credit.

Key Employee

A key employee is:

a) A member of the board of directors of the QHTC; or
b) Directly or indirectly the owner of a majority of the QHTC’s stock; or
c) Related to a member of the QHTC’s board of directors or to a majority stockholder of the QHTC as a spouse or relative within the definition of “dependent” in IRC sec. 152.

DC TAXES AND QHTCs

V. Franchise Tax

For Taxable Years beginning after December 31, 2000, a QHTC filing a DC corporate franchise tax return is granted a reduced corporate franchise tax rate as follows for a Qualified High Technology Company certified pursuant to §47-1805.05:

“(i) Before January 1, 2012, shall not be subject to the tax imposed by this chapter for 5 years after the date that the Qualified High Technology Company commences business in the District; and
“(ii) On or after January 1, 2012, shall not be subject to the tax imposed by this chapter for 5 years after the date that the Qualified High Technology Company has taxable income.

The total amount that each Qualified High Technology Company may receive in exemptions under this paragraph shall not exceed $15 million”.

The transfer of ownership of a QHTC will not affect eligibility for the franchise tax reduction.

VI. Personal Property Tax

Qualified tangible personal property (within the meaning of DC Code §47-1521(4)) purchased and used or held for use by a QHTC (corporate and unincorporated) after December 31, 2000, is exempt from DC personal property tax for 10 years beginning with the year of purchase.

If the tangible personal property is used or is available for use in the eleventh year and thereafter, the property must then be reported at 25% of the original cost or exchange value, unless it is qualified technological equipment (see DC Code §47-1523(b)). In that case it must be reported at 10% of the original cost or exchange value. See pages 22-23 of this publication for information on refunds and exemptions with respect to tangible personal property.

BUSINESS ASSET DEDUCTIONS AND QHTCs

VII. Deductions for Certain Depreciable Business Assets

A QHTC may deduct the lesser of $40,000 or the actual cost of personal property described in IRC section 179(d)(1).

If the QHTC is a tenant, the cost of any real property and leasehold improvements may be deducted regardless of whether they become an integral part of the realty.
Improvements must be substantial and made by the QHTC during any 24-month period beginning after December 31, 2000. They must also be:

- an addition to the basis of the property which exceeds the greater of an amount equal to the adjusted basis of the property at the beginning of the 24-month period or $5,000;
- at least 51% of the cost of the additions are improvements which facilitate the business of the QHTC on the premises; and

**VIII. Unincorporated Business Franchise Tax Exemption**

A QHTC that is **not a corporation** is exempt from the unincorporated business franchise tax but not from the $250 minimum tax requirement. The minimum tax is $250 if DC gross receipts are equal to or less than $1M. Minimum tax is $1,000 if DC gross receipts are greater than $1M. A completed QHTC-CERT form must be filed with a D-30, the unincorporated business franchise tax return.

**IX. Capital Gain and QHTCs**

Qualified capital gain from the sale or exchange of a QHTC's capital assets is no longer exempt based on D.C. Act A-19-0153.

Rollover of capital gain from qualified stock to other qualified stock. Qualified stock is that which satisfies the requirement for small business stock under IRC section 1202(a) and is issued by a QHTC. Where gain is realized on the sale of qualified stock held by a taxpayer, other than a corporation, for more than six months the taxpayer may elect to defer recognition of gain unless it was previously deferred.

However, if a taxpayer purchases qualified stock within 60 days of selling other qualified stock, gain is recognized. Gain is recognized to the extent gain realized on the sale exceeds the cost of the qualified stock purchased.

The taxpayer’s holding period is determined without regard to IRC section 1223. This treatment does not apply to gain considered ordinary income under IRC sections 1245 or 1250.

Please note that a real property tax abatement benefit and various other financial incentives of a non-income/franchise tax nature are provided for QHTCs in the New E-Conomy Transformation Act of 2000.
I certify that this business is a Qualified High Technology Company and that it (check all that apply):

1. □ Is an individual or entity organized for profit;

2. □ Maintains an office, headquarters, or base of operations in the District of Columbia;

3. □ Has two or more employees in the District of Columbia;

4. □ Derives at least 51% of its gross revenues earned in the District from one or more of the following (check all that apply):
   a. □ Internet-related services and sales,
   b. □ Information and communication technologies, equipment and systems that involve advanced computer software and hardware, data processing, visualization technologies, or human interface technologies, whether deployed on the Internet or other electronic or digital media,
   c. □ Advanced materials and processing technologies that involve the development, modification, or improvement of one or more materials or methods to produce devices and structures with improved performance characteristics or special functional attributes, or to activate, speed up, or otherwise alter chemical, biochemical, or medical processes,
   d. □ Engineering, production, biotechnology and defense technologies that involve knowledge-based control systems and architectures; advanced fabrication and design processes, equipment and tools; or propulsion, navigation, guidance, nautical, aeronautical and astronautical ground and airborne systems, instruments and equipment, or
   e. □ Electronic and photonic devices and components for use in producing electronic, optoelectronic, mechanical equipment and products of electronic distribution with interactive media content.

5. □ Does not derive 51% or more of its gross revenue from the operation in DC of a retail store or an electronic equipment facility as defined in DC Code section 47-1817.01 (5)(B)(i)(II); and

6. □ Is appropriately registered as a business in DC and is current in all District Government filing requirements and payment obligations.

7. □ Please enter the principal business activity

Under penalty of perjury, I declare that I have examined this certificate and, to the best of my knowledge, it is correct.

__________________________  ___________________________  _________________
Signature of Owner or Officer       Company Name                      Date

__________________________  ___________________________  _________________
Company Address                      Telephone Number

__________________________  ___________________________  _________________
Fax Number                           e-mail address
WHO MAY USE THE CERTIFICATION FORM?

Any business which qualifies and wishes to be certified as a Qualified High Technology Company.

How should a company submit Form QHTC-CERT?

File the Form QHTC-CERT as an attachment to any of the DC tax returns shown below claiming tax benefits under the New E-Conomy Transformation Act of 2000.

Form D-20 – DC Corporate Franchise Tax Return
Form D-20CR – QHTC Corporate Business Tax Credits
Form FP-31 – DC Personal Property Tax Return
Form D-30 – DC Unincorporated Business Franchise Tax Return
Form D-30CR – QHTC Unincorporated Business Tax Credits

Instructions for completing Form QHTC-CERT

Enter the business name, the Federal Employer Identification Number (FEIN) or the Social Security Number (SSN), and the ending date of the taxable year. For businesses claiming an abatement of real property tax, fill in the square, suffix and lot numbers identifying the real property eligible for abatement. If claiming an abatement for more than one property, please attach a detailed listing. Also indicate the first year certified as a QHTC.

Lines 1 through 6. Place an X in each box that applies to your business.

The Form QHTC-CERT must be signed and dated by an Owner, General Partner or Officer of the business who is authorized to sign. Please provide the business’ address, telephone, fax number and e-mail address.

NOTE: The boxes for lines 1, 2, 3; at least one box in line 4a through 4e; and lines 5 and 6 must be completed. If these boxes are not completed, the business is not a certified Qualified High Technology Company and is not entitled to any of the tax credits or other tax benefits of the New E-Conomy Transformation Act of 2000.
<table>
<thead>
<tr>
<th>PART A — Reduction in DC Corporate Franchise Tax for a Qualified High Technology Company (QHTC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Total District of Columbia Taxable Income (Line 36 of Form D-20) ........................................... $</td>
</tr>
<tr>
<td>2. Regular DC Corporate Franchise Tax (multiply Line 1 amt. by .09975). ............................................ $</td>
</tr>
<tr>
<td>3. Minimum tax. The minimum tax is $250 if DC gross receipts are equal to or less than $1M. Minimum tax is $1,000 if DC gross receipts are greater than $1M.</td>
</tr>
<tr>
<td>4. Amount of Tax Credit (Line 2 minus Line 3) If Line 2 is less than Line 3, skip Line 4 and enter 0 on Line 6 $</td>
</tr>
<tr>
<td>5. Cumulative QHTC Franchise Tax Credits (Total amount of QHTC Franchise Tax Credits to date). If it is $15M or more, enter $0 on Line 6. (If this is less than $15M, see instructions) .................................................... $</td>
</tr>
<tr>
<td>6. Allowable Franchise Tax Credit (see instructions) $</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PART B — Tax Credit for the Costs of Retraining Qualified Disadvantaged Employees during the first 18 months of their employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Number of employees eligible, first 12 months. 12</td>
</tr>
<tr>
<td>2. Total expenditures for retraining Qualified Disadvantaged Employees paid or incurred during this period . $</td>
</tr>
<tr>
<td>3. Amount of Retraining Costs Tax Credit. (Limited to $20,000 per employee for retraining costs incurred during the first 18 months of employment beginning after December 31, 2000.) $</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PART C — Tax Credit for 50% of Wages Paid to Qualified Disadvantaged Employees during the first 24 months of Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Employees eligible in First year 12 2. Months in First year 12</td>
</tr>
<tr>
<td>3. Total Wages paid during tax year 20____ to Qualified Disadvantaged Employees ............................................. $</td>
</tr>
<tr>
<td>4. Tax credit (50% of line 3) .............................................................................................................................. $</td>
</tr>
<tr>
<td>The credit is 50% of qualified disadvantaged employee wages paid during the first 24 months of employment beginning after December 31, 2000, not to exceed $15,000 per employee per year.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PART D — Tax Credit for Relocation Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Number of eligible employees who reside in DC 12</td>
</tr>
<tr>
<td>2. Number of eligible employees who reside outside DC 12</td>
</tr>
<tr>
<td>3. Tax credit for employees residing in DC (limited to $7,500 per employee, see instructions) ...................... $</td>
</tr>
<tr>
<td>4. Tax credit for employees residing outside DC (limited to $5,000 per employee, see instructions) ............... $</td>
</tr>
<tr>
<td>5. Total tax credit (add lines 3 and 4) ................................................................................................................ $</td>
</tr>
</tbody>
</table>
### PART E – TAX CREDIT FOR 10% OF WAGES PAID TO QUALIFIED EMPLOYEES DURING THE FIRST 24 MONTHS OF EMPLOYMENT

1. Number of eligible employees

2. Total Wages paid during this period to Qualified Employees

3. Tax credit – Line 2 x 0.10 (Limited to $5,000 per employee in the tax year.)

### PART F – SUMMARY OF TAX BENEFITS FOR A CORPORATE QHTC

1. Regular DC Corporate Franchise Tax (Part A, Line 2)

2. Tax Credit (Part A, Line 4)

3. Retraining Costs Tax Credit (Part B, Line 3) plus any carryover

4. Qualified Disadvantaged Employee Wages Tax Credit (Part C, Line 4)

5. Relocation Costs Tax Credit (Part D, Line 5) plus any carryover

6. Qualified Employee Wages Tax Credit (Part E, Line 3) plus any carryover

7. Total Tax Credits (add Lines 2 through 6)

8. Net Tax (Line 1 minus Line 7) If Line 7 is greater than Line 1 enter zero

9. Unused Business QHTC Tax Credit Carryover from this year to 20____ (Line 7 minus line 1) (If Line 1 is greater than Line 7 enter 0)

10. Used Business QHTC Tax Credit (Line 7 minus Line 9) If Line 7 is greater than zero enter here and on Schedule UB, Line 2

### PART G – ELECTION TO RECEIVE 50% REFUND FOR QHTC RETRAINING COSTS CREDIT

1. Amount of Unused Business QHTC Tax Credit Carryover to 20____ (Part F, Line 9)

2. Retraining Costs Tax Credit (Part B, Line 3)

3. Unused Business Tax Credit Carryover (Line 1 minus Line 2)

4. Amount from Line 1 or Line 2, whichever is smaller

5. Amount of Retraining Costs Tax Credit to be refunded (50% of Line 4) enter here and on Schedule UB, Line 7
Who may use Form D-20CR?
A business which is a corporation, including a Limited Liability Company (LLC) which has elected to be treated as a corporation for Federal tax purposes and is certified as a QHTC may file a Form D-20CR to claim the applicable credits listed on Form D-20CR.

Should the certification of Gross Revenue be submitted with the Form D-20CR?
Yes, it must be submitted in the first year that the business is a QHTC for six or more months and in all subsequent years.

What is a QHTC?
A QHTC is an individual or entity organized for profit that:
• Maintains an office, headquarters, or base of operations in DC;
• Has 2 or more employees, employed in DC;
• Derives at least 51% of its gross revenue earned in the District from one or more of the permitted activities listed in publication FR-399 and in DC Code sec. 47-1817.01(5)(A)(iii);
• Does not receive 51% or more of its gross revenue earned in the District from operating a retail store or electronic equipment facility in DC; and
• Is appropriately registered as a business in DC, and is current in all DC Government filing requirements and payment obligations.

Which forms are required to claim QHTC credits?
A company must file a DC corporate franchise tax return (D-20) to claim the credits entered on the Form D-20CR. The Certification for Qualified High Technology Company, Form QHTC-CERT, must also be filed. (This is required even if the company has been previously certified as a QHTC.)

PART A - Reduction in the tax rate for a QHTC
This benefit reduces the corporate franchise tax rate for a QHTC from 9.975% to 0%.

A QHTC is not subject to the DC corporate franchise tax imposed on taxable income for a period of five years after the date the QHTC has taxable income. As a QHTC, your cumulative maximum credit for corporate franchise tax is limited to $15M. Enter the lesser of line 4 or the difference between $15M and the amount on line 5. In order to preserve the QHTC tax credit carryover, a QHTC must file a DC corporate franchise tax return for each year in which the QHTC is not subject to the DC corporate franchise tax.

Note: The transfer of ownership of a QHTC does not affect eligibility under this part.

Claiming a Tax Credit Carryover
When claiming a tax credit carryover on your return please attach a copy of your form D-20CR for the year(s) from which the carryover originated.

Part B - Tax credit for the costs of retraining qualified disadvantaged employees during the first eighteen months of employment
A QHTC may claim a credit on its Form D-20 for expenditures paid or incurred during the taxable year for retraining qualified disadvantaged employee(s). This credit may be carried forward for 10 years.

Part C - Tax credit for 50% of the wages paid to qualified disadvantaged employees during the first twenty-four months of employment
A QHTC is allowed a credit against its DC corporate franchise tax equal to 50% of the wages paid to each qualified disadvantaged employee during the first 24 calendar months of employment.

The credit claimed is limited to $15,000 a year for each qualified disadvantaged employee. It may be carried forward for 10 years.

Part D - Tax credit for relocation costs
A QHTC is allowed a credit (subject to a dollar limitation) against its DC corporate franchise tax for each dollar reimbursed to or paid on behalf of each qualified employee for relocation costs. The credit may not exceed:
• $5,000 for each employee who relocates his or her employment to DC from outside DC but does not relocate his or her principal residence to DC. The total annual credit for a QHTC may not exceed $250,000; and
• $7,500 for each employee who relocates his or her employment to DC from outside DC and also relocates his or her principal residence to DC. The total annual credit for a QHTC may not exceed $1,000,000. For purposes of this credit, the principal residence is determined as of the last day of the first six months of employment in DC by a QHTC. This credit may be carried forward for 10 years.

Part E - Tax credit for wages paid to qualified employees during the first twenty-four months of employment
A QHTC is allowed a credit against the DC corporate franchise tax equal to 10% of the wages paid during the first 24 calendar months to a qualified employee. The qualified employee must be hired after December 31, 2000 and employed in DC by the QHTC in the “permitted activities.” This credit may be carried forward for 10 years.

Part F - Summary of tax benefits for a corporate QHTC
This is a summary of tax reductions and credits claimed in Parts A through E. Be careful to copy the correct lines when completing Part F. Enter the amount from line 10 of Part F on Schedule UB, Line 2.

Part G - Election to receive a refund for QHTC retraining costs
Complete this section to receive a refund equal to 50% of the costs to retrain qualified disadvantaged employees. Enter this amount on Schedule UB, Line 3.
# QUALIFIED HIGH TECHNOLOGY COMPANY
## Certification of Gross Revenue
(To be filed with Form D-20CR)

For Tax Year Beginning: _____________________, 20____ and Ending ___________________________

| Company Name: _______________________________________________________________ | FEIN: _____________________________ |

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3 Gross Revenue from Permitted Activities (add column 2 A thru E)</th>
<th>Column 4 Gross Revenue from Non-Permitted Activities (add cols. 3 &amp; 4)</th>
<th>Column 5 Total Gross Revenue from Permitted and Non-Permitted Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC Address</td>
<td>Gross Revenue from Permitted Activities</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Permitted Activities - DC Code § 47-1817.01(5)(A)(iii)**
- Column A – Internet related services and sales.
- Column B – Information and communication technologies, equipment and systems.
- Column C – Advanced material and processing technologies.
- Column D – Engineering, production, biotechnology and defense technologies.
- Column E – Electronic and photonic devices and components.

**NOTE:** Columns A through E must **not** include gross revenue from a retail store or an electronic equipment facility (Data Hotel).
CERTIFICATION OF GROSS REVENUE WORKSHEET

File this worksheet with the Form D-20CR.

Title Line. Enter the beginning and ending dates of the tax year for which certification applies, the name of the business and the Federal Employer Identification Number.

Column 1. DC address or location of each business.

Column 2. For each business location, enter gross revenue from each permitted activity listed.

Column 3. Enter the total for columns A through E for each business location.

Column 4. Enter the gross revenue from the total of non-permitted activities for each location.

Column 5. Enter the total gross revenue (add columns 3 and 4) from permitted and non-permitted activities for each location.
FOR TAX YEAR BEGINNING AFTER DECEMBER 31, 20___

or

Tax Year beginning ____________, __________ 20___ and ending ____________, __________ 20___

BUSINESS NAME _____________________________________________________

☐ FEDERAL EMPLOYER IDENTIFICATION NUMBER OR ☐ SOCIAL SECURITY NUMBER ________________________________

TAX CREDIT FOR COSTS OF RETRAINING QUALIFIED DISADVANTAGED EMPLOYEES DURING THE FIRST 18 MONTHS OF EMPLOYMENT

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Retraining costs (enter total from line 12, Column A, Form FP-332)</td>
<td>$</td>
</tr>
<tr>
<td>2</td>
<td>Maximum allowed total (from line 12, Column C, Form FP-332)</td>
<td>$</td>
</tr>
<tr>
<td>3</td>
<td>Line 1 or 2 whichever is less</td>
<td>$</td>
</tr>
<tr>
<td>4</td>
<td>Retraining costs claimed in prior year (line 12, Column D, Form FP-332)</td>
<td>$</td>
</tr>
<tr>
<td>5</td>
<td>Retraining costs allowable in current year (Line 3 minus Line 4)</td>
<td>$</td>
</tr>
<tr>
<td>6</td>
<td>Amount of Retraining Costs Tax Credit to be refunded (Line 5 times .50)</td>
<td>$</td>
</tr>
<tr>
<td></td>
<td>Enter amount on Schedule UB, Line 15.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Amount of Retraining Costs Tax Credit to be carried forward</td>
<td>$</td>
</tr>
</tbody>
</table>

**INSTRUCTIONS**

Refundable Business Tax Credit for Retraining Costs Incurred By
An Unincorporated Business Qualified High Technology Company

**CREDIT**

An unincorporated business that is a Qualified High Technology Company and has incurred retraining costs for disadvantaged employees may claim a refundable business tax credit equal to 50% of the cost to retrain such employees. The credit may not exceed $20,000 per disadvantaged employee during the first 18 months of employment. Any credit not used may be carried forward for 10 years. When claiming a tax credit carryover on your return please attach a copy of your D-30CR for the year(s) from which the carryover originated.

**FILING THE RETURN**

Mail the completed Forms D-30, D-30CR and FP-332 to the Office of Tax and Revenue, PO Box 96193, Washington, DC 20090-6193.
**CLAIM FOR REFUND OF RETRAINING COSTS**

Qualified High Technology Company – Not a Corporation (File with Form D-30)

**Company Name and Address:** _______________________________________________________________

**Federal Employer Identification Number or Social Security Number:** _______________________________

<table>
<thead>
<tr>
<th>COLUMN A</th>
<th>COLUMN B</th>
<th>COLUMN C</th>
<th>COLUMN D</th>
<th>COLUMN F</th>
</tr>
</thead>
<tbody>
<tr>
<td>RETRAINING COSTS</td>
<td>MAXIMUM AMOUNT ALLOWABLE</td>
<td>AMOUNT IN COL. A OR COL. B, WHICH-EVER IS LESS</td>
<td>AMOUNT CLAIMED IN PRIOR YEAR (COL. C MINUS COL. D)</td>
<td>RETRAINING COSTS AVAILABLE FOR CREDIT IN CURRENT YEAR</td>
</tr>
<tr>
<td>EMPLOYEE’S NAME</td>
<td>SOCIAL SECURITY NUMBER</td>
<td>DATE OF EMPLOYMENT</td>
<td>NUMBER OF MONTHS EMPLOYED</td>
<td>$</td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. TOTALS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. CURRENT YEAR RETRAINING COSTS AVAILABLE FOR TAX CREDIT ................................................................. $ ________________

14. AMOUNT OF REFUNDABLE RETRAINING COSTS TAX CREDIT (50% OF LINE 13) ....................................................... $ ________________

Under penalty of perjury, I declare that I have examined this claim and, to the best of my knowledge, it is correct.

_____________________________________________       _____________________________________________       _________________________________

Signature of Owner or Officer       Company Name       Date

_____________________________________________       _____________________________________________       _________________________________

Company’s Address       Telephone Number       E-Mail Address
INSTRUCTIONS FOR FORM FP-332

Enter the beginning and ending dates of the tax year, the company name and the Federal Employer Identification Number or the Social Security Number.

WHO MAY USE THE FORM FP-332?

A business which is not a corporation and which is a certified Qualified High Technology Company may claim a partial refund of the retraining costs tax credit.

You are a Qualified High Technology Company if:
(a) You are an individual or entity organized for profit;
(b) You maintain an office, headquarters, or base of operations in DC;
(c) You have 2 or more employees in DC;
(d) At least 51% of your gross revenue is derived from one or more of the permitted activities listed in Publication FR-399, Qualified High Technology Companies;
(e) You do not receive 51% or more of gross revenue from operating a retail store or electronic equipment facility in DC;
(f) You are registered as a business in DC; and
(g) You are current in all District Government filing requirements and payment obligations.

HOW AND WHEN TO FILE

To claim the retraining costs tax credit, a Qualified High Technology Company that is not a corporation must attach the following to the Form D-30: Form QHTC-CERT, Certification for Qualified High Technology Company; Form D-30CR, QHTC Unincorporated Business Tax Credits; Schedule UB; and Form FP-332, Claim for Refund of Retraining Costs. Complete Lines 1-36 of the D-30; leave Line 37 blank. Fill in the QHTC oval.
CLAIM FOR REFUND
SALES AND USE TAX

NAME OF TAXPAYER

TRADE NAME

☐ FEDERAL EMPLOYER IDENTIFICATION NO. ☐ SSN

STREET ADDRESS

CITY STATE ZIP CODE PHONE # FAX #

NOTE: FOR TAX PAID ON MORE THAN ONE RETURN, LIST EACH ON A SEPARATE LINE

<table>
<thead>
<tr>
<th>PERIOD ENDED</th>
<th>TOTAL TAX PAID</th>
<th>DATE OF PAYMENT</th>
<th>AMOUNT OF REFUND CLAIMED</th>
<th>EXPLANATION OF OVERPAYMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$ ←TOTAL→ $ (FOR ADDITIONAL SPACE, USE OTHER SIDE)

Under penalties of law the duly authorized applicant(s) do solemnly swear or affirm that the foregoing statements are correct to the best of my (our) knowledge.

AUTHORIZED SIGNATURE

TITLE

DATE

OFFICIAL USE

INITIAL DATE AMOUNT

APPROVED

DENIED
FP-331 Instructions

Sales and Use Tax

Section 47-2020(a) of the DC Sales Tax Act allows a refund of tax erroneously or illegally collected if a claim is filed within **three years** from the date you paid the tax. If the tax has been collected from the customer, it must be refunded by the seller to the customer in cash or credit **before** the vendor can apply for a refund. If the claim relates to a Qualified High Technology Company (QHTC) attach the certification Form QHTC-CERT. Send the original to the Office of Tax and Revenue and save a copy.

Attach your evidence to support the claim for refund. Include copies of original invoices, Certificates of Resale (OTR-368), Qualified High Technology Company Exempt Purchase Certificates (FP-337), tax exemption numbers of semipublic institutions, credit memos for returned sales or taxes refunded to customers and any other related documents.

Mail the claim to:

Office of Tax and Revenue
Audit Division
PO Box 556
Washington, DC 20044-0556

Questions? Call us at (202) 727-4829.
GOVERNMENT OF THE DISTRICT OF COLUMBIA
OFFICE OF TAX AND REVENUE

CERTIFICATE OF RESALE
DISTRICT OF COLUMBIA SALES AND USE TAX

<table>
<thead>
<tr>
<th>TO:</th>
<th>FROM:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SELLER</td>
<td>PURCHASER</td>
</tr>
<tr>
<td>TRADE NAME (IF ANY)</td>
<td>TRADE NAME (IF ANY)</td>
</tr>
<tr>
<td>SELLER’S STREET ADDRESS</td>
<td>PURCHASER’S STREET ADDRESS</td>
</tr>
<tr>
<td>CITY</td>
<td>STATE</td>
</tr>
<tr>
<td>PURCHASER’S STREET ADDRESS</td>
<td></td>
</tr>
<tr>
<td>CITY</td>
<td>STATE</td>
</tr>
<tr>
<td>FEIN</td>
<td>DC CERTIFICATE OF REGISTRATION #</td>
</tr>
</tbody>
</table>

I certify that all of the tangible personal property and services purchased from you in connection with this sale are for resale or rental either in the same form or for incorporation as a material part of other property being produced for resale or rental.

This certificate shall be considered a part of each order we shall give, provided the order contains our DC Certificate of Registration number and will continue in force until revoked by written notice to you.

| AUTHORIZED SIGNATURE | TITLE | DATE |

SELLER MUST KEEP THIS CERTIFICATE

INSTRUCTIONS

This certificate is not valid unless it contains the purchaser’s District of Columbia Sales and Use Tax Registration Number. It must be signed by the owner or authorized officer and must be dated.

If you, as the issuer of the certificate of resale, buy items from the seller that do not qualify for tax exemption, you should advise the seller to charge the appropriate sales tax on such items. Otherwise, the purchaser is required to report to OTR and pay use tax directly using the Sales and Use Tax returns (FR-800A (annual), FR-800M (monthly) or FR-800Q (quarterly).

The seller must retain all Certificates of Resale on file to substantiate exemptions in case of an audit of its DC Sales and Use Tax returns.

To be eligible to use this certificate, purchasers who are located inside or outside the District of Columbia must file DC Form FR-500, Combined Business Tax Registration Application, with the Office of Tax and Revenue, 1101 4th St., SW, Washington DC 20024 (202-727-4829).
### QUALIFIED HIGH TECHNOLOGY COMPANY RETRAINING COSTS FOR QUALIFIED DISADVANTAGED EMPLOYEES

**TAX CREDIT WORKSHEET**

<table>
<thead>
<tr>
<th></th>
<th>Employee 1</th>
<th>Employee 2</th>
<th>Employee 3</th>
<th>Employee 4</th>
<th>Employee 5</th>
<th>Employee 6</th>
<th>Employee 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Employee’s Name</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Employee’s Social Security Number</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Date employed in District</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Training Expense (Note 1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Prior Year Credit (Note 2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Current Year Credit (Subtract line 5 from line 4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note 1** – Total eligible retraining expenditures, not to exceed $20,000, paid or incurred by a QHTC to retrain this Qualified Disadvantaged Employee in his or her first 18 months of employment in DC.

**Note 2** – Qualified Disadvantaged Employee's Retraining Costs Tax Credit claimed for this employee in the prior year.
Qualified High Technology Companies
Qualifying Tangible Personal Property
Refunds and Exemptions

Refund of Personal Property Tax Paid on Qualifying Tangible Personal Property

A certified DC Qualified High Technology Company (QHTC) which paid DC personal property tax on qualifying tangible personal property acquired after December 31, 2000, may claim a refund of the tax paid by filing an amended Form FP-31, personal property tax return.

The qualifying tangible personal property purchased by a certified DC QHTC and held for use in its trade or business must be reported in Schedule D-3 (included in this publication) and filed with Form FP-31.

Exemption from DC Personal Property Tax of Qualifying Tangible Personal Property
Acquired after December 31, 2000

Qualifying tangible personal property purchased and used or held for use in a certified DC QHTC’s business may be claimed as exempt from the DC personal property tax. The property must be reported in a Schedule D-3 filed with Form FP-31. A completed Schedule D-3 and a completed DC Form QHTC-CERT must be filed with Form FP-31.

Schedule D-3 of Form FP-31

A certified DC QHTC claiming exemption for qualifying tangible personal property which it purchased after December 31, 2000, or which is in its possession pursuant to a lease – purchase or security – purchase agreement (a capital lease – under which it is required to become the owner of the property) must report the property in a Schedule D-3 filed with Form FP-31.

All such property acquired or leased under a lease-purchase or security-purchase agreement prior to January 1, 2001, is not tax exempt. The property must be reported in Schedule A of Form FP-31.

Schedule D-4 of Form FP-31

A non QHTC which, after December 31, 2000, rents or leases qualifying tangible personal property to a certified DC QHTC under a lease-purchase or security-purchase agreement must report the property in a Schedule D-4 (included in this publication) filed with Form FP-31.

Note: A non QHTC lessor of such property acquired prior to January 1, 2001, under a similar lease arrangement must report the property in Schedule D-2 of Form FP-31.

Schedule A of Form FP-31

Qualifying tangible personal property leased by a non QHTC under an operating lease (no ownership implication for the lessee) to either a certified QHTC or a non QHTC is subject to the personal property tax. The property tax must be reported in Schedule A of Form FP-31.
Filing an Amended Personal Property Tax Return

Check the amended return box on the Form FP-31 filed for the year you are amending. If the Form FP-31 for the year being amended does not have an amended return box, please write “Amended Return” at the top of the Form FP-31 that you file.

When filing an amended personal property tax return, please attach the following to the return:

- a completed DC Form QHTC-CERT;
- proof of payment of the personal property tax liability for the year being amended;
- a copy of the lease agreement, if relevant; and
- a copy of any purchase invoice(s).
**SCHEDULE D-3—QUALIFYING TANGIBLE PERSONAL PROPERTY PURCHASED BY A CERTIFIED QHTC AND USED OR HELD FOR USE BY THE QHTC (OR LEASED UNDER A CAPITAL LEASE) TO A CERTIFIED QHTC.**

<table>
<thead>
<tr>
<th>PROPERTY TYPE</th>
<th>PURCHASE DATE</th>
<th>QHTC CERTIFICATION DATE</th>
<th>ORIGINAL COST</th>
<th>REMAINING COST</th>
<th>LESSOR'S NAME AND ADDRESS</th>
<th>MONTHLY RENT</th>
<th>DATE LEASE BEGAN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SCHEDULE D-4—QUALIFYING TANGIBLE PERSONAL PROPERTY PURCHASED BY A NON QHTC AND LEASED TO A CERTIFIED QHTC UNDER A CAPITAL LEASE.**

<table>
<thead>
<tr>
<th>PROPERTY TYPE</th>
<th>PURCHASE DATE</th>
<th>LESSEE'S CERTIFICATION DATE</th>
<th>ORIGINAL COST</th>
<th>REMAINING COST</th>
<th>LESSOR'S NAME AND ADDRESS</th>
<th>MONTHLY RENT</th>
<th>DATE LEASE BEGAN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL:** $  
**TOTAL:** $
QHTC High Technology Permitted Activities are:

1. Internet-related services and sales:

   (a) Website design, maintenance, hosting, or operation;
   (b) Internet-related training, consulting, advertising, or promotion services;
   (c) The development, rental, lease, or sale of Internet-related applications, connectivity, or digital content; or
   (d) Products and services that may be considered e-commerce;

2. Information and communication technologies, equipment and systems that involve advanced computer software and hardware, data processing, visualization technologies, or human interface technologies, whether deployed on the Internet or other electronic or digital media. Such technologies, whether deployed on the Internet or other electronic or digital media, shall include:

   (a) Operating and application software;
   (b) Internet-related services, including design, strategic planning, deployment, and management services and artificial intelligence;
   (c) Computer modeling and simulation;
   (d) High-level software languages;
   (e) Neural networks;
   (f) Processor architecture;
   (g) Animation and full-motion video;
   (h) Graphics hardware and software;
   (i) Speech and optical character recognition;
   (j) High volume information storage and retrieval;
   (k) Data compression; and
   (l) Multiplexing, digital signal processing and spectrum technologies.

3. Advanced materials and processing technologies that involve the development, modification, or improvement of one or more materials or methods to produce devices and structures with improved performance characteristics or special functional attributes, or to activate, speed up, or otherwise alter chemical, biochemical, or medical processes. Such materials and technologies shall include:

   (a) Metal alloys;
   (b) Metal matrix and ceramic composites;
   (c) Advanced polymers;
   (d) Thin films;
   (e) Membranes;
   (f) Superconductors;
   (g) Electronic and photonic reduction;
   (h) Pharmaceuticals; bioactive materials; bioprocessing; genetic engineering; catalysts; waste emissions reduction; and
   (i) Waste processing technologies.
4. Engineering, production, biotechnology and defense technologies that involve knowledge-based control systems and architectures; advanced fabrication and design processes, equipment, and tools; propulsion, navigation, guidance, nautical, aeronautical and astronautical ground and airborne systems, instruments, and equipment. Such technologies include:

(a) Computer-aided design and engineering;
(b) Computer-integrated manufacturing;
(c) Robotics and automated equipment;
(d) Integrated circuit fabrication and test equipment;
(e) Sensors;
(f) Biosensors;
(g) Signal and image processing;
(h) Medical and scientific instruments;
(i) Precision machining and forming;
(j) Biological and genetic research equipment;
(k) Environmental analysis, remediation, control and prevention equipment;
(l) Defense command and control equipment;
(m) Avionics and controls;
(n) Guided missile and space vehicle propulsion units;
(o) Military aircraft; space vehicles; and
(p) Surveillance, tracking and defense warning systems.

5. Electronic and photonic devices and components for use in producing electronic, optoelectronic, mechanical equipment and products of electronic distribution with interactive media content. Such technologies include:

(a) Microprocessors;
(b) Logic chips;
(c) Memory chips;
(d) Lasers;
(e) Printed circuit board technology;
(f) Electroluminescent, liquid crystal, plasma and vacuum fluorescent displays;
(g) Optical fibers;
(h) Magnetic and optical information storage;
(i) Optical instruments, lenses, filters;
(j) Simplex and duplex data bases; and
(k) Solar cells.