PATENT ASSIGNMENT

Electronic Version v1.1
Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Northrop Grumman Information Technology, Inc.	11/03/2009

RECEIVING PARTY DATA

Name:	IPWireless Inc.
Street Address:	90 New Montgomery Street
Internal Address:	Suite 315
City:	San Francisco
State/Country:	CALIFORNIA
Postal Code:	94105

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12960774

CH $40.00 12960774

CORRESPONDENCE DATA

Fax Number: (312)277-2397
Phone: 312/577-7000
Email: hdoneg@fitcheven.com
Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.
Correspondent Name: Steven G. Parmelee
Address Line 1: Fitch Even Tabin & Flannery LLP
Address Line 2: 120 S. LaSalle Street, Suite 1600
Address Line 4: Chicago, ILLINOIS 60603

ATTORNEY DOCKET NUMBER:	9010-98743-US
NAME OF SUBMITTER:	Steven G. Parmelee

Total Attachments: 35
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ASSIGNMENT OF INTELLECTUAL PROPERTY AGREEMENT

This Assignment of Intellectual Property Agreement (this "Assignment of Intellectual Property"), is made and entered into as of the 3rd day of November, 2009 by and between IPWireless, Inc., a Delaware corporation, ("IPW") and Northrop Grumman Information Technology, Inc., a Delaware corporation (the "Company"), an affiliate of Northrop Grumman Corporation.

WITNESSETH

WHEREAS, IPW and the Company are parties to that certain Asset Purchase Agreement dated as of December 24, 2008 (the "Purchase Agreement"), pursuant to which IPW sold to the Company and the Company bought certain assets from IPW, including without limitation the Purchased IP and Improvements IP;

WHEREAS, capitalized terms used but not otherwise defined herein shall have the meaning ascribed to such terms in the Purchase Agreement;

WHEREAS, the Company has agreed to sell, assign, convey, transfer and deliver certain of the Purchased Assets and Licensor Improvements (as defined in the License Back Agreement) to IPW and IPW has agreed to purchase and acquire such Purchased Assets and Licensor Improvements (as defined in the License Back Agreement); and

WHEREAS, the parties desire to evidence the vesting in IPW of the Purchased IP, Improvements IP and Licensor Improvements (as defined in the License Back Agreement), including, without limitation, (a) inventions (whether or not patentable), discoveries, improvements, ideas, know-how, technology, formula methodology, processes, technology, software (including password unprotected interpretive code or source code, object code, development documentation, programming tools, drawings, specifications and data), firmware, system design information and applications and patents in any jurisdiction pertaining to the foregoing, including re-issues, continuations, divisions, continuations-in-part, renewals or extensions; (b) trade secrets and know how, including confidential information and the right in any jurisdiction to limit the use or disclosure thereof; (c) copyrighted and copyrightable writings, designs, hardware schematics and specifications, software, mask works or other works, applications, registrations, and derivative works in any jurisdiction for the foregoing and all moral rights related thereto; (d) database rights; (e) rights under all agreements, including agreements with any Person, relating to the foregoing; (f) books, documents and records pertaining to the foregoing; and (g) claims or causes of action arising out of or related to past, present or future infringement or misappropriation of the foregoing, to the extent included in the Purchased IP, Improvements IP or Licensor Improvements (as defined in the License Back Agreement), including, without limitation, those listed on Schedule A attached hereto; and

WHEREAS, in exchange for IPW's payment of the Consideration (as defined in the Bill of Sale), it is the parties' intention to reflect the transfer, conveyance, assignment and delivery of certain of the Purchased Assets and Licensor Improvements (as defined in the License Back Agreement) by the execution and delivery of the following documents of the date herewith (a) this Assignment of Intellectual Property and (b) the Bill of Sale and Assignment Agreement between IPW and the Company (the "Bill of Sale");

NOW, THEREFORE, in consideration of the premises and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

Section 1. The Company does hereby transfer and assign to IPW, and IPW hereby accepts the transfer and assignment of, all of the Company's worldwide right, title and interest in, to and under the Purchased IP, Improvements IP and Licensor Improvements (as defined in the License Back Agreement), including any and all inventions described therein, and in any and all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, and all other applications for letters patent relating thereto which have been or shall be filed in the United States or in any other jurisdiction, all rights to sue for infringement of any Purchased IP, Improvements IP, and Licensor Improvements (as defined in the License Back Agreement) whether arising prior to or subsequent to the date of this Assignment of Intellectual Property, and any and all renewals and extensions thereof that may hereafter be secured under the laws now or hereafter in effect in the United States and in any other jurisdiction, the same to be held and enjoyed by IPW, its successors and assigns from and after the date hereof as fully and entirely as the same would have been held and enjoyed by the Company had this Assignment of Intellectual Property not been made.

Section 2. The Company covenants and agrees that upon request by IPW or its successors or assigns, the Company or its successors or assigns shall, at the sole cost and expense of the Company, perform all other legal actions reasonably necessary to carry out the intent of this Assignment of Intellectual Property as well as provide such other material, information or assistance as IPW or its successors or assigns may consider necessary.

Section 3. This Assignment of Intellectual Property is for the sole benefit of the parties hereto and shall not create any rights in any person not a party. Nothing in this Assignment of Intellectual Property is intended to relieve or discharge the obligations or liability of any third persons to the Company or IPW. No provision of this Assignment of Intellectual Property shall give any third persons any right of subrogation or action over or against the Company or IPW. This Assignment of Intellectual Property will be binding upon, inure to the benefit of, and be enforceable by the successors and permitted assigns of the parties. Nothing in this Agreement is intended to supersede or affect the terms of Section 11.2(b) of the Intellectual Property License Agreement between the parties executed concurrently herewith.

Section 4. This Assignment of Intellectual Property shall be governed by and construed and enforced in accordance with the laws of the State of New York applicable to contracts made and to be performed within such state without giving effect to the applicable principles of conflicts of law to the extent that the application of the laws of another jurisdiction would be required thereby. Each party submits to the exclusive jurisdiction of the U.S. District Court for the Southern District of NY and, failing that court's jurisdiction, the state courts of the State of New York sitting in New York City, NY.

Section 5. Company agrees that, if it is unable or unwilling to perform the actions set out in Section 2, it hereby irrevocably designates and appoints IPW as its Attorney in Fact to act on its behalf to execute and file and papers and to do all other lawfully permitted acts in order to carry out those same actions.

Section 6. EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY WAIVES ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATED TO THIS ASSIGNMENT OF INTELLECTUAL PROPERTY OR THE TRANSACTIONS CONTEMPLATED HEREBY.

Section 7. If any provision of this Assignment of Intellectual Property shall be held invalid or unenforceable, the remainder of this Assignment of Intellectual Property shall not be affected thereby and shall be enforced to the greatest extent permitted by applicable law. It is the intent of the parties that the provisions of this Assignment of Intellectual Property be enforced to the maximum extent possible, and the parties undertake to consult with each other in order to substitute any invalid or unenforceable provision with a valid provision of equivalent effect.

Section 8. This Assignment of Intellectual Property may be executed in two or more counterparts, each of which shall be deemed an original but all of which taken together shall constitute one and the same instrument.

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IN WITNESS WHEREOF, the undersigned has caused this Assignment of Intellectual Property to be executed by the signature of its duly authorized officer as of the date above first written.

IPWIRELESS, INC.

By: _____
Name: DOUGLAS SINCLAIR
Title: CFO

NORTHROP GRUMMAN INFORMATION TECHNOLOGY, INC.

By: _____
Name:
Title:

[Signature Page to Assignment of IP Agreement]

IN WITNESS WHEREOF, the undersigned has caused this Assignment of Intellectual Property to be executed by the signature of its duly authorized officer as of the date above first written.

IPWIRELESS, INC.

By:_____
Name:
Title:

NORTHROP GRUMMAN INFORMATION TECHNOLOGY, INC.

By: [signature]
Name: MARK RABINOWITZ
Title: TREASURER

[Signature Page to Assignment of IP Agreement]

Schedule A

Purchased IP, Improvements IP and Licensor Improvements

A. Patents and Patent Applications

The Patents and Patent Applications shall include, but are not limited to, those set out in the table below as well as all national patents which are derived from any PCT or EPC application listed in the table below. This schedule is illustrative, and does not replace or supercede the definition of Purchased IP set forth in the Agreement.

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1.	01-0068-IPW-USA	USA	5-Jul-02	10/190,300	20030069020		
2.	01-0068-IPW-GB	GB	6-Jul-01	0116557.0		1-Mar-06	GB2377343
3.	01-0068-IPW-PCT	PCT	8-Jul-02	PCT/GB02/03110	WO/2003/005754		
4.	01-0070-IPW-GB	GB	1-Aug-01	0118754.1		13-Jul-05	2378328
5.	01-0070-IPW-PCT	PCT	31-Jul-02	PCT/GB02/03551	WO/2003/013190		
6.	01-0070-IPW-USA	USA	29-Jul-02	10/207,634	20030091132	19-Aug-08	US7415083
7.	01-0071-IPW-01-GB	GB	1-Nov-02	0225497.7		5-Apr-06	2394868
8.	01-0071-IPW-CHIN	China	13-Sep-02	02819606.6	CN1565092A		
9.	01-0071-IPW-EPC	EPC	13-Sep-02	02758611.4	EP1474882A2		
10.	01-0071-IPW-JAPA	Japan	13-Sep-02	527924/2003	25506037		
11.	01-0071-IPW-KORS	Korea	13-Mar-04	1020047003798	1020050027205A		
12.	01-0071-IPW-PCT	PCT	13-Sep-02	PCT/GB02/04184	WO/2003/024000		
13.	01-0071-IPW-USA	USA	12-Sep-02	10/241,966	20030138066	27-Nov-07	US7301930
14.	01-0072-IPW-EPC	EPC	13-Sep-02	02755370.0	EP1466454	3-Dec-08	EP1466454
15.	01-0072-IPW-EPC-01	EPC	4-Feb-08	08101271.8	EP1914950A1		

16.	01-0072-IPW-PCT	PCT	13-Sep-02	PCT/GB02/04193	WO/2003/024045		
17.	01-0072-IPW-USA	USA	12-Sep-02	10/242,481	20030099206	4-Sep-07	US7266093
18.	01-0100-IPW-EPC	EPC	1-Oct-02	02760438.8	EP1470683 A2		
19.	01-0100-IPW-PCT	PCT	1-Oct-02	PCT/GB02/04414	WO/2003/030477		
20.	01-0100-IPW-USA	USA	1-Oct-02	10/262,160	20030095586	1-Apr-08	US7352794
21.	01-0101-IPW-ASTL	Australia	27-Jul-01	A75710/01		19-Jan-06	783211
22.	01-0101-IPW-EPC	EPC	27-Jul-01	01953215.9	EP1410568 A2		
23.	01-0101-IPW-GB	GB	27-Jul-01	0118393.8		10-Nov-04	2369273
24.	01-0101-IPW-JAPA	Japan	27-Jul-01	515857/2002	JP 2004505567 T		
25.	01-0101-IPW-MEXI	Mexico	27-Jul-01	PA/a/2002003157	MXPA 02003157		No information on grant available
26.	01-0101-IPW-PCT	PCT	27-Jul-01	PCT/GB01/03381	WO/2002/11466		
27.	01-0101-IPW-SING	Singapore	27-Jul-01	200201709-3		29-Apr-05	88040
28.	01-0101-IPW-USA	USA	27-Jul-00	09/626,699			21.11.08 – Abandoned 02.12.08 – Petition to review
29.	01-0102-IPW-ASTL	Australia	27-Jul-01	76469/01		8-Dec-05	782703
30.	01-0102-IPW-EPC	EPC	27-Jul-01	01954120.0	EP1410570 A2		
31.	01-0102-IPW-GB	GB	27-Jul-01	0118392.0		10-Nov-04	GB2369272
32.	01-0102-IPW-JAPA	Japan	27-Jul-01	515859/2002	JP 2004505569 T		

33.	01-0102-IPW-MEXI	Mexico	27-Jul-01	PA/a/2002 003158	MXPA 02003158A		No information on grant available
34.	01-0102-IPW-PCT	PCT	27-Jul-01	PCT/GB01 /03388	WO/20 02/11468		
35.	01-0102-IPW-SING	Singapor e	27-Jul-01	200201711 -9		30-Dec-05	0088042
36.	01-0102-IPW-USA	USA	27-Jul-00	09/626,582			
37.	01-0103-IPW-ASTL	Australia	27-Jul-01	75711/01		13-Jul-06	784411
38.	01-0103-IPW-EPC	EPC	27-Jul-01	01953216. 7	EP1410569 A2		
39.	01-0103-IPW-GB	GB	27-Jul-01	0118391.2		10-Nov-04	GB2369271
40.	01-0103-IPW-JAPA	Japan	27-Jul-01	515858/20 02	JP 2004505568		
41.	01-0103-IPW-MEXI	Mexico	27-Jul-01	PA/a/2002 003159	MXPA 02003159		No information on grant available
42.	01-0103-IPW-PCT	PCT	27-Jul-01	PCT/GB01 /03385	WO/20 02/11467		
43.	01-0103-IPW-SING	Singapor e	27-Jul-01	2002 01710-1		31-Oct-07	88041
44.	01-0103-IPW-USA	USA	27-Jul-00	09/626,700			
45.	01-0108-IPW-EPC	EPC	23-Oct-02	02801963. 6	EP1476953 A1		
46.	01-0108-IPW-PCT	PCT	23-Oct-02	PCT/GB02 /04791	WO/20 03/036811		
47.	01-0108-IPW-USA	USA	24-Oct-02	10/279,698	2003009922 6	6-May-08	US7369601
48.	01-0110-IPW-EPC	EPC	24-Oct-02	02801966. 9	EP 1476957A1		
49.	01-0110-IPW-PCT	PCT	24-Oct-02	PCT/GB02 /04811	WO/20 03/036816		
50.	01-0110-IPW-USA	USA	23-Oct-02	10/278,366	2005000384 6	30-Jan-07	US7171230
51.	01-0113-IPW-EPC	EPC	21-Oct-02	02770082. 2	EP 1472803	6-Aug-08	EP 1472803

52.		AT	21-Oct-02	AT2002077008T	AT403979T		
53.	01-0113-IPW-PCT	PCT	21-Oct-02	PCT/GB02/04731	WO/2003/034606		
54.	01-0113-IPW-USA	USA	21-Oct-02	10/274,806	20030152043	25-Dec-07	US7313118
55.	01-0117-IPW-CON	USA	19-Feb-08	12/033,824	20080225890		
56.	01-0117-IPW-EPC	EPC	14-Nov-02	02779683.8	EP1483848A1		
57.	01-0117-IPW-GB	GB	14-Nov-01	0127319.2			GB2379841
58.	01-0117-IPW-PCT	PCT	14-Nov-02	PCT/GB02/05151	WO/2003/043227		
59.	01-0117-IPW-USA	USA	13-Nov-02	10/293,635	20050018712	8-Apr-08	US7356098
60.	01-0118-IPW-EPC	EPC	24-Oct-02	02772549.8	EP1476983	8-Aug-07	EP1476983
61.	01-0118-IPW-FRAN	France	24-Oct-02	02772549.8		8-Aug-07	EP1476983
62.	01-0118-IPW-GB	EPC	24-Oct-02	02772549.8		8-Aug-07	EP1476983
63.	01-0118-IPW-GERM	Germany	24-Oct-02	02772549.8	DE60221714.8T2	8-Aug-07	
64.	01-0118-IPW-ITAL	Italy	24-Oct-02	02772549.8		8-Aug-07	EP1476983
65.	01-0118-IPW-PCT	PCT	24-Oct-02	PCT/GB02/04823	WO/2003/036869		
66.		AT	24-Oct-02	AT20020772549T	AT369675T		
67.	01-0118-IPW-SPAI	Spain	24-Oct-02	02772549	ES 2289150	8-Aug-07	ES 2289150
68.	01-0118-IPW-USA	USA	23-Oct-02	10/278,342	20030103497	06-Oct-08	US7385994
69.	01-0120-IPW-CZEC	Czech Republic	23-Oct-02	02770096.2		4-Apr-07	EP1477039
70.	01-0120-IPW-EPC	EPC	23-Oct-02	02770096.2	EP1477039	4-Apr-07	EP1477039
71.	01-0120-IPW-	France	23-Oct-02	02770096.2	EP1477039	4-Apr-07	EP1477039

	FRAN						
72.	01-0120-IPW-GB	EPC	23-Oct-02	02770096.2	EP1477039	4-Apr-07	EP1477039
73.	01-0120-IPW-GERM	Germany	23-Oct-02	02770096.2		4-Apr-07	60219366.4
74.		AT	23-Oct-02	AT20020770096T	AT358958T		
75.	01-0120-IPW-ITAL	Italy	23-Oct-02	02770096.2		4-Apr-07	EP1477039
76.	01-0120-IPW-PCT	PCT	23-Oct-02	PCT/GB02/04788	WO/2003/037024		
77.	01-0120-IPW-SPAI	Spain	23-Oct-02	02770096.2	ES 2284924	4-Apr-07	ES 2284924
78.	01-0120-IPW-USA	USA	22-Oct-02	10/277,545	US 2003095571		
79.	01-0127-IPW-CHIN	China	5-Dec-02	02826857.1	CN1613199		
80.	01-0127-IPW-CHIN-D1	China		200810091718.0	CN101262263		
81.	01-0127-IPW-CON	USA	24-Apr-08	12/109,247	US20080207251		
82.	01-0127-IPW-EPC	EPC	5-Dec-02	02788078.0		26-Dec-07	EP1490983
83.	01-0127-IPW-EPC-DIV	EPC-DIV	27-Apr-07	07107157.5	EP1806853 A2		
84.	01-0127-IPW-FRAN	France	5-Dec-02	02788078.0		26-Dec-07	EP1490983
85.	01-0127-IPW-GB	GB	5-Dec-01	0129098.0	GB2382956	1-Mar-06	GB2382956
86.	01-0127-IPW-GB2	GB	5-Dec-02	02788078.0			
87.	01-0127-IPW-GERM	Germany	5-Dec-02	02788078.0		26-Dec-07	60224304.1
88.	01-0127-IPW-ITAL	Italy	5-Dec-02	02788978.0		26-Dec-07	EP1490983 No info available as

							to status of the patent
89.	01-0127-IPW-JAPA	Japan	5-Dec-02	550392/2003			JP25512388
90.	01-0127-IPW-KORS	Korea	05-Jun-04	1020047008723	1020050058280A		
91.	01-0127-IPW-PCT	PCT	5-Dec-02	PCT/GB02/05541	WO/2003/049320		
92.	01-0127-IPW-SPAI	Spain	5-Dec-02	02788078.0	ES 2295431	26-Dec-07	ES 2295431
93.	01-0127-IPW-USA	USA	4-Dec-02	10/309,498	20040043783	13-May-08	US7373161
94.	01-0128-IPW-CON-USA	USA	30-Sep-05	11/241,043	20060030301	23-Oct-07	US286832
95.	01-0128-IPW-EPC	EPC	24-Oct-02	02772553.0		7-Jun-06	EP1477040
96.	01-0128-IPW-FRAN	France	24-Oct-02	02772553.0		7-Jun-06	EP1477040
97.	01-0128-IPW-GB	EPC	24-Oct-02	02772553.0	EP1477040	7-Jun-06	EP1477040
98.	01-0128-IPW-GERM	Germany	24-Oct-02	02772553.0		7-Jun-06	60212197.3
99.	01-0128-IPW-PCT	PCT	24-Oct-02	PCT/GB02/04832	WO/2003/037025		
100.	01-0128-IPW-SPAI	Spain	24-Oct-02	02772553	ES2268094	7-Jun-06	ES2268094
101.		AT	24-Oct-02	AT20020772553T			AT329471T
102.	01-0128-IPW-USA	USA	24-Oct-02	10/279,697	20030096616	13-Jun-06	US7062278
103.	02-0008-IPW-CHINA	China	15-May-03	03811006.7	CN1653719		
104.	02-0008-IPW-EPC	EPC	15-May-03	03722873.1	EP 1506626	26-Nov-08	EP 1506626
105.		KR		5000542A			
106.	02-0008-IPW-INDI	India	26-Oct-04	PCT/GB03/02119	3310/DELNP/2004		

107.	02-0008-IPW-INDI-D1	India	15-May-03	PCT/GB03/02119	6845/DELNP/2006		
108.	02-0008-IPW-INDI-D2	India	26-Oct-04	PCT/GB03/02119	6844/DELNP/2006		
109.	02-0008-IPW-JAPA	Japan	15-May-03	506211/2004			JP25526445W
110.	02-0008-IPW-KORS	Korea	15-Nov-04	1020047018414	1020050000542A		
111.	02-0008-IPW-PCT	PCT	15-May-03	PCT/GB03/02119	WO/2003/098836		
112.	02-0008-IPW-USA	USA	15-May-03	10/439,250	20040077368	12-Aug-08	US 7412252
113.	02-0031-IPW-CHIN	China	8-Apr-03	03811286.8	CN1653739		CN 1653739
114.	02-0031-IPW-EPC	EPC	8-Apr-03	03717442.2		28-Nov-07	EP1495569
115.	02-0031-IPW-FRAN	France	8-Apr-03	03717442.2		28-Nov-07	EP1495569
116.	02-0031-IPW-GB(E)	EPC	8-Apr-03	03717442.2		28-Nov-07	EP1495569
117.	02-0031-IPW-GERM	Germany	8-Apr-03	03717442.2		28-Nov-07	60317780.8
118.	02-0031-IPW-INDI	India	8-Apr-03	PCT/GB03/01577	3086/DELNP/2004		
119.	02-0031-IPW-ITAL	Italy	8-Apr-03	03717442.2		28-Nov-07	EP1495569
120.	02-0031-IPW-JAPA	Japan	8-Apr-03	585342/2003			JP 2005522936
121.	02-0031-IPW-KORS	Korea	08-Oct-04	1020047016092	1020040097329A		
122.		AT	8-Apr-03	AT20030717442T			AT379891T
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124.	02-0031-	Spain	8-Apr-03	03717442.	ES2294273	28-Nov-07	ES2294273

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125.	02-0031-IPW-USA	USA	8-Apr-03	10/409,281	20040071172		
126.	02-0075-IPW-EPC	EPC	24-Oct-03	03758356.4	EP1557016	23-Jan-08	EP1557016
127.	02-0075-IPW-FRAN	France	24-Oct-03	03758356.4		23-Jan-08	EP1557016
128.	02-0075-IPW-GB	GB	24-Oct-02	0224757.5	GB2394623	30-Aug-06	GB2394623
129.	02-0075-IPW-GB(E)	GB	24-Oct-03	03758356.4		23-Jan-08	EP1557016
130.	02-0075-IPW-GERM	Germany	24-Oct-03	03758356.4		23-Jan-08	EP1557016
131.	02-0075-IPW-ITAL	Italy	24-Oct-03	03758356.4		23-Jan-08	EP1557016
132.		AT	24-Oct-03	AT20030758356T			AT385113T
133.		DE		60318881D1			
134.	02-0075-IPW-PCT	PCT	24-Oct-03	PCT/GB2003/004587	WO/2004/039098		
135.	02-0075-IPW-SPAI	Spain	24-Oct-03	03758356.4	ES2299724	23-Jan-08	ES2299724
136.	02-0075-IPW-USA	USA	7-Apr-06	10/531,151		10-Jul-07	7,242,908
137.	02-0096-IPW-EPC	EPC	17-May-04	04733378.6	EP1627467A1		
138.	02-0096-IPW-GB	GB	16-May-03	0311311.5	GB2401733	19-Apr-06	GB2401733
139.	02-0096-IPW-PCT	PCT	17-May-04	PCT/GB2004/002111	WO/2004/102801		
140.	02-0096-IPW-USA	USA	17-May-04	10/556,560	20070140386		US 2007140386
141.	03-0039-IPW-EPC	EPC	25-Jun-04	04743079.8	EP1642427A1		
142.	03-0039-IPW-GB	GB	27-Jun-03	0315009.1	GB2403378	30-May-07	GB2403378

143.	03-0039-IPW-PCT	PCT	25-Jun-04	PCT/GB2004/002728	WO/2005/002148		
144.	03-0039-IPW-USA	USA	25-Jun-04	10/561,726	20060268708		
145.	03-0056-IPW-CHINA	China	22-Feb-05	200580013105.X	CN1977468		
146.	03-0056-IPW-EPC	EPC	22-Feb-05	05716764.5	EP1726102 A1		
147.	03-0056-IPW-GB	GB	8-Mar-04	0405166.0	GB2412036		
148.	03-0056-IPW-JAPAN	Japan	22-Feb-06	2007-502326			JP27528171W
149.	03-0056-IPW-KORS	Korea	04-Oct-06	1020067020866	1020060124785A		
150.	03-0056-IPW-PCT	PCT	22-Feb-05	PCT/EP2005/050755	WO/2005/086367		
151.	03-0056-IPW-USA	USA	3-Mar-05	11/071,954	20050232195		
152.	03-0059-IPW-GB	GB	9-Jul-04	0415422.5	GB2416093 A	11-Jun-08	GB2416093
153.	04-0002-IPW-EPC	EPC	10-May-05	05739854.7	EP1751879 A1		
154.	04-0002-IPW-GB	GB	20-May-04	0411242.1	GB2414366		
155.	04-0002-IPW-PCT	PCT	10-May-05	PCT/EP2005/052116	WO/2005/114859		
156.	04-0002-IPW-USA	USA	11-Apr-08	11/596,795			
157.	04-0004-IPW-EPC	EPC	10-May-05	05749939.4	EP1752010 A1		
158.	04-0004-IPW-GB	GB	17-May-04	0410987.2	GB2414361	1-Oct-08	GB 2414361
159.	04-0004-IPW-PCT	PCT	10-May-05	PCT/EP2005/052115	WO/2005/112499		
160.	04-0004-IPW-USA	USA	10-May-05	11/597,086	20070298800		

161.	04-0101-IPW-EPC	EPC	16-Jun-05	05760931.5	EP1800504 A1		
162.	04-0101-IPW-PCT	PCT	16-Jun-05	PCT/EP2005/052795	WO/2005/125240		
163.	04-0101-IPW-USA	USA	21-Jun-04	10/873,065	20050281233		
164.	04-0103-IPW-CHINA	China	16-Sep-05	200580052012.8 (PCT/EP2005/054637)	CN101305558 (WO2007031116)		
165.	04-0103-IPW-EPC	EPC	16-Sep-05	05789626.8	EP1938519 A1		
166.	04-0103-IPW-JAPA	Japan	16-Sep-05	PCT/EP2005/054637	WO 2007031116		
167.	04-0103-IPW-KORS	Korea	16-Sep-05	PCT/EP2005/054637	WO 2007031116		
168.	04-0103-IPW-PCT	PCT	14-Sep-05	PCT/EP2005/054637	WO/2007/031116		
169.	04-0103-IPW-USA	USA	14-Sep-04	10/941,551	20060056373		
170.	04-0108-IPW-CHIN	China	10-Aug-05	200580027091.7	CN101002402		CN 101002402
171.	04-0108-IPW-EPC	EPC	10-Aug-05	05801370.7	EP1779545 A1		
172.	04-0108-IPW-JAPA	Japan	10-Aug-05	2007-525302			
173.	04-0108-IPW-KORS	Korea	08-May-07	1020077005478	1020070051311A		
174.	04-0108-IPW-PCT	PCT	10-Aug-05	PCT/EP2005/053931	WO/2006/015983		
175.	04-0108-IPW-USA	USA	12-Aug-04	10/917,968	20060035660		Final rejection mailed from USPTO 10.08.08

176.	04-0109-IPW	USA	11-Aug-05	11/202,535	20060039343		
177.	04-0109-IPW-CHIN	China	11-Aug-05	200580027121.4	CN101002415		CN101002415
178.	04-0109-IPW-EPC	EPC	11-Aug-05	05777946.4	EP1779572 A1		
179.	04-0109-IPW-JAPA	Japan	11-Aug-05	2007-525307			JP2008514037
180.	04-0109-IPW-KORS	Korea	07-Feb-07	1020077002961	1020070039129A		
181.	04-0109-IPW-PCT	PCT	11-Aug-05	PCT/EP2005/053966	WO/2006/015988		
182.	04-0111-IPW-CHIN	China	10-Feb-06	200680004914.9	CN101120532		CN 101120532
183.	04-0111-IPW-EPC	EPC	10-Feb-06	06708205.7	EP1851894 A1		
184.	04-0111-IPW-JAPA	Japan	10-Feb-06	2007-554573			JP 2008537852
185.	04-0111-IPW-KORS	Korea	17-Aug-07	1020077018863	1020070110854A		
186.	04-0111-IPW-PCT	PCT	10-Feb-06	PCT/EP2006/050863	WO/2006/084907		
187.	04-0111-IPW-USA	USA	14-Feb-05	11/058,570	20060183429		
188.	05-0103-IPW-CHIN	China	9-Feb-06	200680019378.X	CN101189901		
189.	05-0103-IPW-EPC	EPC	9-Feb-06	06708150.5	EP1880566 A1		
190.	05-0103-IPW-GB	GB	3-May-05	0508799.4	GB2427097	21-Mar-07	GB2427097
191.	05-0103-IPW-JAPA	Japan	9-Feb-06	2008-509397			
192.	05-0103-IPW-KORS	Korea	16-Nov-07	1020077026704	1020080011198A		

	[illegible] Reference Code	Country	Date of Filing	App. No.	Publication No.	Grant Date	Grant No.
193.	05-0103-IPW-PCT	PCT	9-Feb-06	PCT/EP2006/050806	WO/2006/117251		
194.	05-0103-IPW-USA	USA	30-Sep-05	11/241,644	20060251030		
195.	05-0104-IPW-CHIN	China	9-Feb-06	200680020924.1	CN101194532		CN11194532A
196.		EP	09-Feb-06	08010122 4	EP1942696 A1		
197.		KR	04-Dec-07	1020077028310	1020080009152A		
198.	05-0104-IPW-EPC	EPC	9-Feb-06	06708151.3	EP1886522 A1		
199.	05-0104-IPW-EPC-D1	EPC	1-Feb-08	0508801.8			2425917
200.	05-0104-IPW-GB	GB	3-May-05	0508801.8	GB2425917	13-Jun-07	GB2425917
201.	05-0104-IPW-JAPA	Japan	9-Feb-06	2008-509398			
202.	05-0104-IPW-KORS	Korea	26-Nov-07	1020077027480	1020080013938A		
203.	05-0104-IPW-PCT	PCT	9-Feb-06	PCT/EP2006/050807	WO/2006/117252		
204.	05-0104-IPW-USA	USA	30-Sep-05	11/241,646	20060251031		
205.	05-0110-IPW-CHINA	China	7-Jul-06	200680030745.6	CN101248632		
206.	05-0110-IPW-EPC	EPC	7-Jul-06	06777664.1	EP1917764 A1		
207.	05-0110-IPW-GB	GB	24-Aug-05	0517219.2	GB2429605	4-Jun-06	GB2429605
208.	05-0110-IPW-JAPAN	JAPA	7-Jul-06	PCT/EP2006/064034			
209.	05-0110-IPW-KORS	Korea	29-Feb-08	1020087005128	1020080034014A		

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
210.	05-0110-IPW-PCT	PCT	7-Jul-06	PCT/EP2006/064034	WO/2007/023022		
211.	05-0110-IPW-USA	USA	30-Sep-05	11/241,630	20070047474		
212.	05-0116-IPW-PCT	PCT	27-Apr-07	PCT/EP2007/054154	WO/2007/128710		
213.	05-0116-IPW-USA	USA	8-May-06	11/430,421	20070258433		
214.	05-0121-IPW-CHIN	China	20-Jul-06	200680030486.7	CN101243619		
215.	05-0121-IPW-EPC	EPC	20-Jul-06	060792531.3	EP1917727A1		
216.	05-0121-IPW-JAPA	Japan	20-Jul-06	PCT/EP2006/064459	WO 2007023043		
217.	05-0121-IPW-KORS	Korea	06-Mar-08	1020087005541	1020080041237A		
218.	05-0121-IPW-PCT	PCT	20-Jul-06	PCT/EP2006/064459	WO/2007/023043		
219.	05-0121-IPW-USA	USA	22-Aug-05	11/208,512	20070042784		Final rejection mailed from USPTO 05.09.08
220.	05-0123-IPW-CHINA	China	20-Jul-06	200680030636.4	CN101273606		
221.	05-0123-IPW-EPC	EPC	20-Jul-06	06764237.1	EP1917775A1		
222.	05-0123-IPW-JAPA	JAPA	20-Jul-06	PCT/EP2006/064460	WO/2007/023044		
223.	05-0123-IPW-KORS	Korea	27-Feb-08	1020087004666	1020080028509A		
224.	05-0123-IPW-PCT	PCT	20-Jul-06	PCT/EP2006/064460	WO/2007/023044		

225.	05-0123-IPW-USA	USA	23-Aug-05	11/209,465	20070475213		Final rejection mailed from USPTO 16.10.08
226.	06-0002-IPW-PCT	PCT	25-Apr-08	PCT/EP2008/055078	WO/2008/132168		
227.	06-0002-IPW-USA	USA	25-Apr-07	11/796,007			US 2008267148
228.	06-0004-IPW-PCT	PCT	24-Apr-08	PCT/EP2008/055028	WO/2008/132146		
229.	06-0004-IPW-USA	USA	27-Apr-07	11/796,181	20080267135		
230.	06-0006-IPW-USA	USA	31-Aug-07	11/849,184			
231.	06-0010-IPW-GB	GB	16-Aug-06	0616241.6	GB2440978A		
232.	06-0010-IPW-PCT	PCT	26-Jul-07	PCT/IB2007/002226	WO/2008/020281		
233.	06-0010-IPW-USA	USA	20-Mar-07	11/726,397	20080045263		
234.	06-0019-IPW-PCT	PCT	2-Oct-07	PCT/EP2007/060443	WO/2008/040725		
235.	06-0019-IPW-USA	USA	2-Oct-06	11/542,514	20080080464		
236.	06-0021-IPW-PCT	PCT	21-Dec-07	PCT/EP2007/064483	WO/2008/077951		
237.	06-0021-IPW-USA	USA	27-Dec-06	11/646,692	20080159185		
238.	07-0004-IPW-USA	USA	27-Sep-07	11/863,205	20080188247		
239.	07-0016-IPW-USA	USA	4-Mar-08	12/042,259			
240.		CN	09-Feb-2006	200810081440.9	CN101252414		

B. IPW Proprietary Software

All rights to software code, firmware or hardware design language code (including source code, object code and executable code) relating to the NYCWiN Program, including but not limited to:

- Release 5 "system" software which spans Node B and INC and User Equipment;
- ER-7 "system" software which spans Node B and INC and User Equipment;
- Element Management System (EMS) supporting both Release 5 and ER-7;
- User Equipment Management System (UMS) supporting both Release 5 and ER-7;
- Subscriber Software (a.k.a. Dialer) supporting PCMCIA, P1D, PEM, USB Stick and Adapter supporting both Release 5 and ER-7;
- Windows drivers for PCMCIA, P1D, USB Stick and PEM. Linux driver for PEM;
- TUIP test software;
- All test software used in development & system test;
- All software used in manufacturing and manufacturing tests;
- All software relating to simulations or simulation tools;
- All firmware embedded in hardware associated with an IPW Product or the NYCWiN Program, including:
    - Software versions that run on any processing unit in the system (including both base station and user equipment products);
    - Firmware loaded on any solid state device such as flash memory or PROM/EPROM;
    - Digital signal processor software existing in an IPW Product (both source code and executable code);
    - Programmable ASIC code which are typically programmed at boot time;
    - Any other programmable devices included in an IPW Product; and
- All hardware design language code (such as UHDL or Verilog) associated with any chips, devices or circuitry relating to an IPW Product or the NYCWiN Program.

Relevant software includes all past, present and future software releases developed and/or delivered to Northrop Grumman for the NYCWiN Program over the term of this agreement, Examples of such software are further specified below:

[illegible]	[illegible] Stack	[illegible]
UE & INC	GMM	GPRS Mobility Management (GMM) procedures for GPRS services (performed by the GMM entity of the Mobility Management (MM) sublayer) are defined in 3GPP TS 24.007. Depending on how they can be initiated, two types of GMM procedures can be distinguished: i) GMM common procedures: Initiated by the network when a GMM context has been established: - P-TMSI (re-) allocation; - GPRS authentication and ciphering; - GPRS identification; - GPRS information ii) GMM specific procedures: Initiated by the network and used to detach the IMSI in the network for GPRS services and/or non-GPRS services and to release a GMM context: - GPRS detach. Initiated by the MS and used to attach or detach the IMSI in the network for GPRS services and/or non-GPRS services and to establish or release a GMM context: - GPRS attach and combined GPRS attach; - GPRS detach and combined GPRS detach. Initiated by the MS when a GMM context has been established: - normal routing area updating and combined routing area updating;

Header	Protocol Stack	Description
		- periodic routing area updating. In UMTS, initiated by the MS and used to establish a secure connection to the network and/or to request the resource reservation for sending data: - Service Request.
UE & INC	SM	The main function of the session management (SM) is to support PDP context handling of the user terminal. The SM comprises procedures for identified PDP context activation, deactivation and modification. SM procedures for identified access can only be performed if a GMM context has been established between the MS and the network. If no GMM context has been established, the MM sublayer has to initiate the establishment of a GMM context by use of the GMM procedures. After GMM context establishment, SM uses services offered by GMM (see 3GPP TS 24.007). Ongoing SM procedures are suspended during GMM procedure execution
UE	RRC	IPWireless have a proprietary Radio Resource Control implementation based on a subset of (3GGP TS 25.331) • Services to NAS/SM/GMM o AS (Access Stratum) indications o Logical Channel for transparent NAS signalling • Services to RRM • Logical to transport channel configuration • AS connection setup/reselection/handover • AS radio bearer setup/reconfiguration • AS radio link setup/reconfiguration • RNTI/H-RNTI/E-RNTI allocation • RLC/MAC/FP/L1 configuration

Product	Protocol Stack	Implementation
UE & INC	RLC	IPWireless have a proprietary Radio Link Control implementation based on a subset of (3GGP TS 25.322) • Layer 2 services for Layer 3 DCCH logical channels (RRC/NAS) • Layer 2 services for user plane DTCH logical channels • SDU segmentation into PDUs • SDU in-order delivery • PDU/SDU re-transmission
UE & INC	MAC	IPWireless have a proprietary Medium Access Control implementation based on a subset of (3GGP TS 25.321) • Logical channel to transport channel multiplexing • Logical channel prioritisation • Transport format selection • Services to RLC: • MAC-d (R99) • MAC-hs/MAC-es (ER7) • Shared/Common channel scheduling (ER7)
UE	PPP relay	IPWireless have a proprietary PPP Relay implementation based on a subset of 3GPP TS 27.060. Following the successful establishment of the PDP context – the TE starts PPP negotiation. The UE relays these frames from the TE to the Core network. In addition, the UE inspects the PPP negotiation packets to establish the 'L2' framing used by the TE. Once the UE has the 'L2' framing information it can convert the incoming asynchronous PPP frame from the TE to a synchronous PPP frame without a checksum. This reduces the amount of data that has to be transmitted over the air without affecting the PPP payload. Similarly, the PPP relay function takes synchronous PPP frames received from the Core Network and converts them to asynchronous frames,

Entity	Protocol Stack	Implementation
		based on the known 'L2' framing, to be relayed to the TE.
Node B & INC	FP	The Framing Protocol (FP) operates between the RNI and the Node B. The Protocol runs over the IuB Interface. The protocol is subdivided into Control and Data procedures. The FP Control PDUs are primarily used to establish Frame Synchronisation between the RNI and the Node B. The FP Data PDUs carry MAC Transport Channel Blocks between the RNI and the Node B. At the Node B the FP Data PDU Transport Channel Blocks are passed to Layer1 for "Over The Air" transmission, also Transport Channel Blocks from the Air Interface are received by the Layer1 and transported to the RNI using FP Data PDUs. In addition to the data payload, the FP Data PDUs contain information for the Layer1 Software to configure the Air Interface for the transmission and reception of the Transport Channel Blocks.
Node B & INC	NBAP	The Node B Application Protocol (NBAP) operates between the RNI and the Node B. The protocol runs over the IuB Interface and provides configuration and reporting procedures to the Node B. In the IP Wireless implementation NBAP runs over UDP/IP. Each NBAP PDU is contained in a UDP Datagram. The Protocol provides a mechanism for the RNI to configure a Cell in the Node B. This includes Cell Setup Information such as Frequency and Power, Transport Channel Configuration for the BCH, FACH, RACH, DSCH and USCH Channels. The Protocol also configures the Systems Information broadcast on the BCH to all UEs, this information is read by the UE when it camps onto a cell. Finally the Protocol establishes Periodic Measurement Reports from the Node B to the RNI for Uplink Timeslots.
Node B	MLPPP	MLPPP (Multi-Link PPP) is defined by RFC 1990 and is an optional extension to PPP (Point to Point

Protocol	Protocol Stack	Implementation
		Protocol) defined by RFC 1661. PPP is used to encapsulate and transmit IP (Internet Protocol) datagrams over serial point to point connections. MLPPP implements a technique called "link aggregation" to enable a number of physical serial links to be used as a single logical link. The NodeB V4 and INC use MLPPP over 1 to 4 E1 (2.048 Mbps) or T1/DS1 (1.544 Mbps) digital carrier transmission lines to provide a single higher speed logical IP interface over which the Iub backhaul is run. This is used to transport the management (SNMP), NBAP and FP protocols. The NodeB V4 and INC do not implement the IPCP (Internet Protocol Control Protocol) or PAP (PPP Authentication Protocol) PPP options. NOTE: MLPPP (and PPP) is not used by the NodeB V5. It is only used by the NodeB V4 and V3/V2.
INC	RRM	Radio Resource Management: • Power control • Timing Advance • Configuration management • Common channel scheduling • Shared channel scheduling • Dedicated channel allocation • Call access control
INC	UP	
INC	GTP	IPWireless have a proprietary implementation based on a subset of 3GPP TS 29.060 (General Packet Radio Service (GPRS); GPRS Tunnelling Protocol (GTP) across the Gn and Gp interface) GTP provides control plane (GTP-C) and user plane (GTP-U) protocols. IPWireless implement the GTP-U protocol, which transports user plane packet transfer over UDP/IP between the Radio Network Controller (RNC) and the Serving GPRS Support Node (SGSN). These may both exist in the same

Target	Protocol Stack	Implementation
		Integrated Network Controller (INC) sub-element, or in a handover scenario, between the RNC and SGSN of different INCs. The following messages are supported:- 1. Path management messages (a) Echo Request (b) Echo Response 2. Data transfer messages (a) GTPU Unit Data Req (b) GTPU Unit Data Ind All other GTP messages are unsupported
UE	PDC	Packet Data Convergence • Header Compression (TCP/UDP/RTP) • Packet routing (mapping IP streams to different priority bearers) • Services to RRM
Client software	Dialler Stack	
Client software	Installscript	
Software for configuring ICT platform for Node B		Manufacturing factory testing
JTAG TestStand Wrapper		Manufacturing factory testing for Node B
JTAG TestStand Wrapper		Manufacturing factory testing for RF

Product	Proposed Task	Implementation
Digital board functional test TestStand software		Manufacturing factory testing for Node B
RF board functional test TestStand software		Manufacturing factory testing for RF
MTR Calibration TestStand Software		Manufacturing factory testing for Node B
MTR Calibration TestStand Software		Manufacturing factory testing for RF
Staging test software		Manufacturing factory testing for Node B
Staging test software		Manufacturing factory testing for RF
ICT software		Manufacturing test for UE
Modem board functional test TestStudio software		Manufacturing test for UE
Modem MTR TestStand software		Manufacturing test for UE
Modem Radiated block error rate test TestStand software		Manufacturing test for UE

Product	Protocol Stack	Implementation
Web based Access Database front end		Storing results of software feature test.
Regression test suite software		Software for automated Load Bring Up testing
Software to run software / hardware integration tests		Software running a set of function tests based on standard regression tests as part of the software / hardware integration process.
NI measurement and automation suite		System test
TestStand		Software relating to Digital board and RF board functional tests.

C. Other Documentation

All manuals, specifications, process diagrams or other documents relating to the NYCWiN Program, including but not limited to:

- Documentation delivered accompanying product relating to the NYCWiN Program including but not limited to:
    - Installation manuals for v5c Node B, full capacity INC, version 1 and version 2 TTLNAs
    - Element manager System Administration/Installation Manual
    - Element manager User Guide
    - User Equipment Management System (UMS) System Adminstration/Installation Manual/User Guide
    - Modem user guides for 2.5 GHz P1D, PCMCIA, PEM and PEM Ethernet Adapter
- Product design documentation for hardware and software relating to the NYCWiN Program including but not limited to:
    - Release 5 and ER-7 feature description documents

- Requirements documents (RRDs)
- Feature Specification documents (FSDs)
- Architecture documents
- High Level Design and Low Level Design documents

- Test documentation for hardware and software relating to the NYCWiN Program, including but not limited to:
  - Unit, Feature, System, Key Performance, FOA (acceptance test) and manufacturing test plans
  - Unit, Feature, System, Key Performance, FOA (acceptance test) and manufacturing test station configuration descriptions
  - Bills of materials for test tools and platforms
- Documentation relating to the "build" of software including but not limited to:
  - Bill of materials of software tools and hardware platforms
  - Descriptions of the configuration of such tools and platforms
- Documentation relating to simulation tools, including the hardware and software used to perform simulations
- Technical data package enabling the manufacture of all in scope hardware products including:
  - Bill of materials
  - All relevant product designs, drawings and schematics
  - All relevant designs, drawings, schematics and bills of material for test jigs and automated test stations

Examples of such documentation are further specified below.

Document	Description
Software documentation within Sharepoint	Includes documentation relating to the IPW proprietary software, hardware schematics and Bills of Material
Spreadsheet of consigned test equipment by factory	Spreadsheets in respect of Syntech, Flextronics China, IPW and Jabil

Document	Description
Software Feature Test Documents	Test documentation written by System Engineering & Feature Test Team
Software Feature test team documents	Test details for running software feature test and results
System test documents	Test documents written by System Test with input from System Engineering and Development
System test plan	Defines coverage, procedure and configurations in respect of each phase of testing
Factory test node B documentation	
IPW factory test requirements: test requirements, test overview, test HLD	Factory test documentation stored in Share Point
IPW factory test development: SW guidelines, command reference guide	Factory test documentation stored in SharePoint
IPW factory test configuration: installation instructions, tray schematics, calibration process	Factory test documentation stored in SharePoint
IPW factory test ongoing support: maintenance, issue tracking, release notes	Factory test documentation stored in SharePoint
Load Bring Up test equipment documentation	Test equipment documentation stored in SharePoint
Software test equipment documentation within Sharepoint	Software scripts maintained by the software development group

D. Databases

All databases which are relating to the NYCWiN Program, including but not limited to those specified below.

Database	Description
MKS	Repository of source code including historical source code versions, modification requests, trouble tickets, FPGA and ASIC

Database	Description
	VHDL
Sharepoint	Repository of software documentation – system used to manage the documentation.
Factory Network Database	SQL database for all historical and current data from manufacturing tests: Test results data collection on all stations Failure analysis and statistics Fail response from development for issues
Access Database	Repository of feature test results

E. Designs

All designs relating to the NYCWiN Program, including but not limited to those specified below.

1. Registered Designs

Design Number	Description	Registration Date	Renewal Date
2102954	Base station for wireless communication system	24 July 2001	2 July 2011
2102953	Wireless modem	24 July 2001	2 July 2011
2102952	Wireless modem	24 July 2001	2 July 2011

2. Unregistered Designs

Design	Description
ICT custom fixtures for NodeB Digital and RF	Manufacturing factory test for Node B

cards	
RF JTAG bench top fixture	RF JTAG Manufacturing factory test
RF board manual test fixture	RF board functional test
Digital JTAG Chassis	Digital JTAG manufacturing test for Node B
Digital board functional test chassis	Digital board manufacturing test for Node B
Modem ICT fixtures (SnapSHOT)	Fixture for manufacturing test for UE
JTAG custom fixtures for Node B	Fixture for manufacturing test for UE
Custom fixture for board functional test	Fixture for manufacturing test for UE
Modem MTR bread bin fixture	Fixture for manufacturing test for UE
Custom fixtures manufactured by Test Solutions Limited.	Fixture for manufacturing test for UE

F. Know-How

All Know-How rights relating to the NYCWiN Program, to the extent transfer is permitted by law, including but not limited to the know-how necessary to develop, manufacture, maintain and improve the IPW Products. Examples of Know-How are further specified below.

1. Software Test

Know-How	Description
Test overview	Overview of hardware and software testing process
Engineering change procedures	Procedures for hardware revisions and validating software against such revisions.
New Feature / Bug Fix Development	Software development process
Concurrent Feature Development	Software development process
Feature Development Guidelines	Software development process
Software unit testing	Test environment either Win 32 test environment on development platform or test harness running on target platform Fast regression testing exists for RLC, MAC, NBAP, FP and Scheduler

Process for comparison of results of software feature tests against simulations as well the process for conducting the simulations	Carried out by systems engineering in the analysis of the results of software feature tests.

2. Hardware Test

Know How	Description
Pre-manufacture hardware testing processes	Including design verification and software / hardware integration testing
Design verification testing	Testing of hardware proves the functional and parametric aspects of PCB assemblies and unit both at normal conditions and over varying temperatures and voltages.
Software/hardware integration process	Primarily comprises two stages: 1. Software support for hardware team to run DVD 2. Software to run a set of functional tests based mainly on standard regression tests.

3. System Test

Know How	Description
System Test Lab Network	Diagram Revision 1.1 Drawn by P. Stephen 25 November 2008
SSR Soak Test	
FDP and UDP test script	
T-mobile Key Performance Indicators	T-mobile KPIs are used in the assessment of certain functionality of the NYC system.
System Test Automated Process	Process flow chart
System test automated testing	Including air interface testing and

	approximately 15 key tests

4. Manufacturing Test

Name/Item	Description
IPW factory test requirements: test requirements, test overview, test HLD	Factory test documentation stored in Share Point
IPW factory test development: SW guidelines, command reference guide	Factory test documentation stored in SharePoint
IPW factory test configuration: installation instructions, tray schematics, calibration process	Factory test documentation stored in SharePoint
IPW factory test ongoing support: maintenance, issue tracking, release notes	Factory test documentation stored in SharePoint
Procedures included as part of configuration control in factory test development	Includes change requests and patch procedures.
BFT Tests	Factory test development
Block Error Rate Tests	Factory test development
MTR tests	Factory test development
Staging tests	Factory test development
UE factory tests	Including modem production line, ICT, JTAG, BFT, MTR and recording results
Product requirements for Golden Units	Golden units are produced in order to verify test platforms