Please return via mail,	PatCom Administrator, IEEE-SA Standards Board Patent Committee
e-mail (as a PDF), or fax:	Institute of Electrical and Electronics Engineers, Inc.
	445 Hoes Lane
	Piscataway, NJ 08854 USA
	FAX (+1 732-875-0524) e-mail: patcom@ieee.org
	No license is implied by submission of this Letter of Assurance
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A. SUBMITTER:	
	760 1 1 1 m
Legal Name: INKIA (Institut N	lational de Recherche en Informatique et en Automatique) ("Submitter")
B. SUBMITTER'S CONTAC	T INFORMATION (for the purpose of licensing information):
accessment and access access and access and access access access and access	
Contact Name/Title: M. Luc C	
	Management and Transfer Office
	ceau - Rocquencourt - BP 105 Cedex - PRANCE
	Fax: +33.1 3963 5114. E-mail: htc.grateau@intia.fr
URL: www.inria.fr	100 property of the second of
	se the content, or confirm the accuracy or consistency of any contact information or
web site listed above.	
C. IEEE STANDARD OR PR	OJECT (e.g., AMENDMENT, CORRIGENDA, OR REVISION):
r 1 3467 638	the appropriate to the total and the territories to the territories and the territories are the territorie
limited to the following:	of the IEEE-SA Standards Board Operations Manual, this licensing position is
W-730002	V. W. 2014 N. W. A. B. W. B. W
and the second s	2.11s
Title: ESS Mesh Networking	
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D. SUBMITTER'S POSITION	N REGARDING LICENSING OF ESSENTIAL PATENT CLAIMS:
In accordance with Clause 6 of	the IEEE-SA Standards Board Bylaws, the Submitter hereby declares the following

In accordance with Clause 6 of the *IEEE-SA Standards Board Bylaws*, the Submitter hereby declares the following (Check box 1 or box 2 below):

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<ul> <li>a. The Submitter will grant a license without compensation to an unrestricted number of a worldwide basis with reasonable terms and conditions that are demonstrably free of un discrimination.</li> <li>(Optional) A sample of such a license (or material licensing terms) that is substato what the Submitter would offer is attached.</li> <li>b. The Submitter will grant a license under reasonable rates to an unrestricted number of a worldwide basis with reasonable terms and conditions that are demonstrably free of un discrimination.</li> </ul>	
to what the Submitter would offer is attached.   b. The Submitter will grant a license under reasonable rates to an unrestricted number of a worldwide basis with reasonable terms and conditions that are demonstrably free of un discrimination.	411
a worldwide basis with reasonable terms and conditions that are demonstrably free of un discrimination.	ntially simila
Optional) These reasonable rates will not exceed of product price, flat fee, per unit).	(e.g., percen
(Optional) A sample of such a license (or material licensing terms) that is substated to what the Submitter would offer is attached.	ntially similar

Contact person

1 May 2007 (Form version 20 June 2007)

IEEE STDS

**②** 002/014

02/25/2008 10:26 FAX

Contact person

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# **G. SIGNATURE:**

By signing this Letter of Assurance, you represent that you have the authority to bind the Submitter and all Affiliates (other than those Affiliates excluded above) to the representations and commitments provided in this LOA and acknowledge that users and implementers of the [Proposed] IEEE Standard identified in part C above are relying or will rely upon and may seek enforcement of the terms of this LOA. The Submitter and all Affiliates (other than those Affiliates excluded above) agree not to sell or otherwise transfer any rights in any Essential Patent Claims that they hold, control, or have the ability to license with the intent of circumventing or negating any of the representations and commitments made in this LOA.

The Submitter agrees (a) to provide notice of a Letter of Assurance either through a Statement of Encumbrance or by binding any assignee or transferee to the terms of such Letter of Assurance; and (b) to require its assignee or transferee to (i) agree to similarly provide such notice and (ii) to bind its assignees or transferees to agree to provide such notice as described in (a) and (b).

If, as described in Clause 6 of the *IEEE-SA Standards Board Bylaws*, the Submitter becomes aware of additional Patent Claims not already covered by an existing Letter of Assurance that are owned, controlled, or licensable by the Submitter that may be or become Essential Patent Claims with respect to the standard identified in C above, the Submitter agrees to submit a Letter of Assurance stating its position regarding enforcement or licensing of such Patent Claims.

Print name of authorized person: Bruno Sp	ortisse	1 m	
Title of authorized person: Technology Tra	insfer and Ingovation Departme	int Director	
Signature of authorized person:		Date: 02/11/08:	
Address: Domaine de Voluceau - Rocqueno	court + BP 105 - 78153 Le Ches	nay Cedex - France	Part and apple
Phone: #33 1 39 63 5134	E-mail: brunë sportisse@ii	aria fr	

Note: This assurance applies from the date of the standard's approval to the date of the standard's withdrawal and is irrevocable upon acceptance by the IEEE-SA.

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Piscataway, NJ 08854 USA

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#### A. SUBMITTER:

Legal Name: INRIA (Institut National de Recherche en Informatique et en Automatique) ("Submitter")

# B. SUBMITTER'S CONTACT INFORMATION (for the purpose of licensing information):

Contact Name/Title: M. Luc Grateau - Director

Department: Intellectual Assets Management and Transfer Office

Address: Damaine de Voluceau - Rocquencourt - BP 105

78153 Le Chesnay Cedex - FRANCE Telephone: +33 | 39 63 5459 Fax: +33 | 3963 5144 E-mail: fue grateau@innia fr

URL: www.inria.fr

Note: The IEEE does not endorse the content, or confirm the accuracy or consistency of any contact information or web site listed above.

# C. IEEE STANDARD OR PROJECT (e.g., AMENDMENT, CORRIGENDA, OR REVISION):

In accordance with Clause 6.3.5 of the *IEEE-SA Standards Board Operations Manual*, this licensing position is limited to the following:

Standard/Project Number: 802.11s

Title: ESS Mesh Networking

# D. SUBMITTER'S POSITION REGARDING LICENSING OF ESSENTIAL PATENT CLAIMS:

In accordance with Clause 6 of the *IEEE-SA Standards Board Bylaws*, the Submitter hereby declares the following *(Check box 1 or box 2 below)*:

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X	1.	The Submitter may own, control, or have the ability to license Patent Claims that might be or become
		Essential Patent Claims. With respect to such Essential Patent Claims, the Submitter's licensing position is
		as follows (must check a, b, c, or d and any applicable subordinate boxes):

a. The Submitter will grant a license without compensation to an unrestricted number of applicants on
a worldwide basis with reasonable terms and conditions that are demonstrably free of unfair
discrimination.

(Optional) A sample of such a license (or material licensing terms) that is substantially similar
to what the Submitter would offer is attached.

X	b. The Submitter will grant a license under reasonable rates to an unrestricted number of applicants on
	a worldwide basis with reasonable terms and conditions that are demonstrably free of unfair
	discrimination

Optional) These reasonable rates will not exceed	(e.g.,	percent
of product price, flat fee, per unit).		

(Optional) A sample of such a license (or material licensing terms) that is substantially similar
to what the Submitter would offer is attached.

<ul> <li>c. The Submitter without conditions will not enforce any present or future Essential Patent Claims against any person or entity making, using, selling, offering to sell, importing, distributing, or implementing such a compliant implementation.</li> </ul>
d. The Submitter is unwilling or unable to grant licenses according to the provisions of either a or b above or to agree that it will not enforce its Essential Patent Claims as described in c above.
2. After a Reasonable and Good Faith Inquiry, the Submitter is not aware of any Patent Claims that the Submitter may own, control, or have the ability to license that might be or become Essential Patent Claims.
E. SCOPE OF ASSURANCE:
Note: Complete this section only if box 1 in part D above is checked.
The Submitter may, but is not required to, identify one or more of its Patent Claims that it believes might be or become Essential Patent Claims. (Check box 1 or box 2 below)
1. When checked, this Letter of Assurance only applies to the Patent Claims identified below that are or become Essential Patent Claims. (If no Patent Claim is identified below, then this Letter of Assurance applies to all Essential Patent Claims supported by the disclosure in the patent or patent applications listed below.)
Patent/Application/Docket Number: PR 9715870  Description/Title (optional): Apparatus and method for interconnection between network segments communication.
Claim (optional):
Patent/Application/Docket Number: EP 0924898  Description/Title (optional): Apparatus and method for interconnection between network segments communication
Claim (optional):
Patent/Application/Docket Number: US 6483852  Description/Title (optional): Apparatus and method for interconnection between network segments communication.
Claim (optional):
For additional patents, use additional pages as necessary.
2. When checked, this Letter of Assurance is a Blanket Letter of Assurance. As such, all Essential Patent Claims that the Submitter may currently or in the future have the ability to license shall be available under the terms as indicated above in part D.1; however, a Blanket Assurance shall not supersede any pre-existing or simultaneously submitted specific assurance identifying potential Essential Patent Claims.
F. APPLICATION TO AFFILIATES:
With respect to any Essential Patent Claims that an Affiliate has the ability to license, the Submitter agrees that (i) the licensing positions described in parts C and D above apply to any Essential Patent Claims within the scope of the assurance described in part E; and (ii) the terms of this assurance are binding on each such Affiliate; provided, however, that such representations and commitments shall not apply to Affiliates identified below:
Organization's Name Organization's Name
Address Address
Contact person Contact person
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# **G. SIGNATURE:**

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Print name of authorized person: Bruno Sportisse	
Title of authorized person: Technology Transfer and Ippo	valion Department Director
Signature of authorized person:	Date: 02/11/08
Address: Domaine de Voluceau « Rocquencourt - BP 105	- 78153 Le Cheshay Cedex - France
Phone: #33 1 39 63 5134 had. 11 1 1 E-mail: br	uno.sportisse@inris.fr

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### B. SUBMITTER'S CONTACT INFORMATION (for the purpose of licensing information):

Contact Name/Title: M. Luc Grateau - Director

Department: Intellectual Assets Management and Transfer Office Address:

Domaine de Voluceau 2 BP 105 - 78153 Le Chesnay Cedex

Telephone: +33 1 39 63 5459 Fax: +33 1 39 63 5114 E-mail: loc.graicain@inria.fr

URL: www.inria.fr

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# C. IEEE STANDARD OR PROJECT (e.g., AMENDMENT, CORRIGENDA, OR REVISION):

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Standard/Project Number: 802.11s

Title: ESS Mesh Networking

D. SUBMITTER'S POSITION REGARDING LICENSING OF ESSENTIAL PATENT CLAIMS:

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<i< th=""><th>The Submitter may own, control, or have the ability to license Patent Claims that might be or become</th></i<>	The Submitter may own, control, or have the ability to license Patent Claims that might be or become
	Essential Patent Claims. With respect to such Essential Patent Claims, the Submitter's licensing position is
	as follows (must check a, b, c, or d and any applicable subordinate boxes):

a. The Submitter will grant a license without compensation to an unrestricted number of applicants on
a worldwide basis with reasonable terms and conditions that are demonstrably free of unfair
discrimination

Optional) A sample of such a license (or material licensing terms) that is substantially sin	nilar
to what the Submitter would offer is attached.	

X	b. The Submitter will grant a license under reasonable rates to an unrestricted number of applicants on
	a worldwide basis with reasonable terms and conditions that are demonstrably free of unfair
	discrimination

(Optional) These reasonable rates will not exceed	(e.g.,	percen
of product price, flat fee, per unit).		

Optional) A sample of such a license (or material licensing terms) that is substantially	similaı
to what the Submitter would offer is attached.	

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c. The Submitter without conditions will not enforce any present or future Essential Patent Claims against any person or entity making, using, selling, offering to sell, importing, distributing, or implementing such a compliant implementation.							
d. The Submitter is unwilling or unable to grant licenses according to the provisions of either a or b above or to agree that it will not enforce its Essential Patent Claims as described in c above.							
2. After a Reasonable and Good Faith Inquiry, the Submitter is not aware of any Patent Claims that the Submitter may own, control, or have the ability to license that might be or become Essential Patent Claims.							
E. SCOPE OF ASSURANCE:							
Note: Complete this section only if box 1 in part D above is checked.							
The Submitter may, but is not required to, identify one or more of its Patent Claims that it believes might be obecome Essential Patent Claims. (Check box 1 or box 2 below)	r						
1. When checked, this Letter of Assurance only applies to the Patent Claims identified below that are or become Essential Patent Claims. (If no Patent Claim is identified below, then this Letter of Assurance applies to all Essential Patent Claims supported by the disclosure in the patent or patent applications listed below.)							
Patent/Application/Docket Number: FR 9300750   Description/Title (optional): Radio Network Type Data Transmission Method and Facility							
Claim (optional):							
Patent/Application/Docket Number: EP 0637417 Description/Title (optional): Radio Network Type Data Transmission Method and Facility							
Claim (optional):							
Patent/Application/Docket Number: US 5638449  Description/Title (optional): Data Transmission Installation of the radio network type and corresponding proc	ess:						
Claim (optional):							
For additional patents, use additional pages as necessary.							
2. When checked, this Letter of Assurance is a Blanket Letter of Assurance. As such, all Essential Patent Claims that the Submitter may currently or in the future have the ability to license shall be available under the terms as indicated above in part D.1; however, a Blanket Assurance shall not supersede any pre-existing or simultaneously submitted specific assurance identifying potential Essential Patent Claims.							
F. APPLICATION TO AFFILIATES:							
With respect to any Essential Patent Claims that an Affiliate has the ability to license, the Submitter agrees that (i) the licensing positions described in parts C and D above apply to any Essential Patent Claims within the scope of the assurance described in part E; and (ii) the terms of this assurance are binding on each such Affiliate; provided, nowever, that such representations and commitments shall not apply to Affiliates identified below:							
Organization's Name Organization's Name							
Address Address							
Contact person Contact person							
1 N - 2007 (F)							

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Print name of authorized person: M. Bruno Sportisse	
Title of authorized person: Technology Transfer and Inno	yation Department Director
Signature of authorized person:	Date: 02/11/08
Address: Domaine de Voluceau - BP 105 - 78153 Le Ches	may Cédex - France
Phone: +33 1 39 93 5134 E-mail: br	ino.sportisse@inria.fr

Note: This assurance applies from the date of the standard's approval to the date of the standard's withdrawal and is irrevocable upon acceptance by the IEEE-SA.

# Letter of assurance for essential patent claims of INRIA (continued)

Patent/Application/Docket Number: CA 2132626

**Description/Title (optional):** Radio Network-type data transmission method and facility

Patent/Application/Docket Number: JP 8505023

Description/Title (optional): Radio Network-type data transmission method and facility

Patent/Application/Docket Number: DE 69422452

Description/Title (optional): Radio Network-type data transmission method and facility

Luc Grateau INRIA

Intellectual Assets Management and Transfer Office Director

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e-mail	(as a F	DF	or fa

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Institute of Electrical and Electronics Engineers, Inc.

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Piscataway, NJ 08854 USA

FAX (+1 732-875-0524) e-mail: patcom@ieee.org

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Legal Name: INRIA (Institut National de Recherche en Informatique et en Automatique) ("Submitter")

# B. SUBMITTER'S CONTACT INFORMATION (for the purpose of licensing information):

Contact Name/Title: M. Luc-Grateau - Director Department: Intellectual Assets Management and Transfer Office " Address:

Domaine de Voluceau - BP 105 - 78153 Le Chesnay Cedex

Telephone: +33 1 39 63 5459 Fax: +33 1 39 63 51 4 E-mail: luc\_grateau@inria.fr URL: www.inria.fr

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### C. IEEE STANDARD OR PROJECT (e.g., AMENDMENT, CORRIGENDA, OR REVISION):

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Standard/Project Number: 802.11s Title: ESS Mesh Networking

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(Optional) These reasonable rates	will not	t exceed		(e.g.,	percent
of product price, flat fee, per unit)					

(Optional) A sample of such a license (or material licensing te	rms) that is substantially simila
to what the Submitter would offer is attached.	-

Contact person

1 May 2007 (Form version 20 June 2007)

IEEE STDS

**②** 012/014

02/25/2008 10:37 FAX

Contact person

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Print name of authorized person: M. Bruno Sportisse	
Title of authorized person: Technology Transfer and Innovati	ou Department Director
Signature of authorized person:	Date: 02/11/08 with the control of t
Address: Domaine de Voluceau - BP 105 - 78153 Le Chesna	Cedex - France
Phone: #33 1 39 63 5134 E-mail: brune	sportisse@inria.tr

Note: This assurance applies from the date of the standard's approval to the date of the standard's withdrawal and is irrevocable upon acceptance by the IEEE-SA.

# Letter of assurance for essential patent claims of INRIA(continued)

Patent/Application/Docket Number: EP 0862298

Description/Title (optional): Installation of a radio data transmission network with routing

Patent/Application/Docket Number: EP 0849914

Description/Title (optional): Collision detection by transmitting data over a radio network

Patent/Application/Docket Number: US 6023457

Description/Title (optional): Data transmission installation of the radio network type and

corresponding method

Luc Grateau

**INRIA** 

Intellectual Assets Management and Transfer Office Director