MEMORANDUM OF UNDERSTANDING

THIS MEMORANDUM OF UNDERSTANDING ("MOU") is made this 19th day of November, 2011, by and between the IEEE Sensors Council (the "Council") and IEEE Aerospace and Electronic Systems, IEEE Antennas and Propagation Society, IEEE Broadcast Technology Society, IEEE Circuits and Systems Society, IEEE Communications Society, IEEE Computer Society, IEEE Components, Packaging and Manufacturing Technology Society, IEEE Dielectrics and Electrical Insulation Society, IEEE Electromagnetic Compatibility Society, IEEE Electron Devices Society, IEEE Engineering in Medicine and Biology Society, IEEE Industrial Electronics Society, IEEE Industry Applications, IEEE Instrumentation and Measurement Society, IEEE Magnetics Society, IEEE Microwave Theory and Techniques Society, IEEE Nuclear and Plasma Sciences Society, IEEE Oceanic Engineering Society, IEEE Photonics Society, IEEE Power Engineering Society, IEEE Robotics Society, IEEE Signal Processing Society, IEEE Solid State Circuits Society, IEEE Ultrasonics, Ferroelectrics and Frequency Control Society and IEEE Vehicular Technology Society ("member Societies") (collectively known as the "Parties") which are integral parts of The Institute of Electrical and Electronics Engineers, Incorporated, a New York not-for-profit corporation ("IEEE"), and sets forth the relationship and obligations relating to the Council's communication to member Society individual members.

1. DURATION OF MOU: This MOU addresses the rights and obligations with respect to the relationship between the Council and member Societies. Parties may withdraw from this MOU at anytime by providing 90 day written notice to the other parties. It is to be reviewed by the parties every 3 years. Without written objection from the parties, this MOU will remain in place.

2. RESPONSIBILITIES OF THE SPONSORING PARTIES:

Each sponsoring society will allow the Sensors Council to send up to four email messages annually to all individual members of the society. The Sensors Council will forward a draft of the message content to the Society Presidents or their designee via email at least one week prior to the date of distribution, for their information and review. The Society President, or their designee, is not required to respond to this email if the contents are acceptable, but must respond if they object to the content.

3. GENERAL TERMS AND CONDITIONS:

<u>Non-Binding Effect</u>: In accordance with IEEE Bylaws Section I-107.2, the Sponsoring Parties are integral parts of the IEEE and not separate organizations. Accordingly, the Parties are subject to the internal governance structures of the IEEE and ultimately the IEEE Board of Directors. As a result, this MOU shall not be contractually binding but shall reflect the internal understandings of the Sponsoring Parties as to the Council.

<u>Entire Agreement</u>: This MOU shall contain the entire agreement between the Parties and supersedes all prior and contemporaneous agreements, arrangements, negotiations and understandings between the Parties relating to the subject matter thereof. There are no other understandings, statements, or promises of inducement, oral or otherwise, contrary to the terms of this MOU.

Notices: Any notice given under this MOU to any of the Sponsoring Parties may be effected by: (i) email or, (ii) facsimile, receipt of which is confirmed by facsimile confirmation.

<u>Counterparts</u>: This MOU may be executed simultaneously in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. If either party uses a scanned or facsimile transmittal, that copy shall be deemed to be an original.

The Institute of Electrical and Electronics Incorporated acting through Its IEEE Sensors Council	The Institute of Electrical and Electrical Engineers, Incorporated acting through Its IEEE Aerospace and Electronic Systems	ough
Authorized Signature	Authorized Signature	
Vladimir Lumelsky		
Print Name	Print Name	
President		
Title	Title	
NASA - Goddard Space Flight Center		
Address	Address	
Greenbelt, MD 20771		
City, State, Country, Postal Code	City, State, Country, Postal Code	
+1 (301) 286 6621		
Phone/Fax	Phone/Fax	
Lumelsky@ieee.org		
Email	Email	
The Institute of Electrical and Electronics Engineers, Incorporated		
IEEE Authorized Signature		
Print Name		
Title		

The Institute of Electrical and Electronics Incorporated acting through Its IEEE Sensors Council	The Institute of Electrical and Electr Engineers, Incorporated acting thro Its IEEE Antennas and Propagation S	ugh
Authorized Signature	Authorized Signature	
Vladimir Lumelsky		
Print Name	Print Name	
President		
Title	Title	
NASA - Goddard Space Flight Center		
Address	Address	
Greenbelt, MD 20771		
City, State, Country, Postal Code	City, State, Country, Postal Code	
+1 (301) 286 6621		
Phone/Fax	Phone/Fax	
Lumelsky@ieee.org		
Email	Email	
The Institute of Electrical and Electronics Engineers, Incorporated		
IEEE Authorized Signature		
Print Name		
Title		

The Institute of Electrical and Electronics Incorporated acting through Its IEEE Sensors Council	The Institute of Electrical and Electronics Engineers, Engineers, Incorporated acting through Its IEEE Broadcast Technology Society
Authorized Signature	Authorized Signature
Vladimir Lumelsky	
Print Name	Print Name
President	
Title	Title
NASA - Goddard Space Flight Center	
Address	Address
Greenbelt, MD 20771	
City, State, Country, Postal Code	City, State, Country, Postal Code
+1 (301) 286 6621	
Phone/Fax	Phone/Fax
Lumelsky@ieee.org	
Email	Email
The Institute of Electrical and Electronics Engineers, Incorporated	
IEEE Authorized Signature	
Print Name	
Title	

Ine Institute of Electrical and Electronics Incorporated acting through Its IEEE Sensors Council	Engineers, Incorporated acting throu Its IEEE Circuit and Systems Society	
Authorized Signature	Authorized Signature	
Vladimir Lumelsky Print Name	Print Name	
President Title	 Title	
NASA - Goddard Space Flight Center		
Address	Address	
Greenbelt, MD 20771 City, State, Country, Postal Code	City, State, Country, Postal Code	
+1 (301) 286 6621 Phone/Fax	Phone/Fax	
Lumelsky@ieee.org	 Email	
Email	Email	
The Institute of Electrical and Electronics Engineers, Incorporated		
IEEE Authorized Signature		
Print Name		
Title		

Authorized Signature
Vladimir Lumelsky
Print Name
President Title
NASA - Goddard Space Flight Center Address
Greenbelt, MD 20771 City, State, Country, Postal Code
+1 (301) 286 6621 Phone/Fax
<u>Lumelsky@ieee.org</u> Email
The Institute of Electrical and Electronics Engineers, Incorporated
IEEE Authorized Signature
Print Name
 Title

The Institute of Electrical and Electronics Engineers, Engineers, Incorporated acting through Its IEEE Communications Society

Authorize	ed Signature
Print Nan	ne
Title	
Address	
City, State	e, Country, Postal Code
Phone/Fa	nx .
Email	

The Institute of Electrical and Electronics Incorporated acting through Its IEEE Sensors Council	The Institute of Electrical and Electronics Engineers Engineers, Incorporated acting through Its IEEE Computer Society
Authorized Signature	Authorized Signature
Vladimir Lumelsky	
Print Name	Print Name
President	
Title	Title
NASA - Goddard Space Flight Center	
Address	Address
Greenbelt, MD 20771	
City, State, Country, Postal Code	City, State, Country, Postal Code
+1 (301) 286 6621	Dh /F
Phone/Fax	Phone/Fax
Lumelsky@ieee.org	
Email	Email
The Institute of Electrical and Electronics Engineers, Incorporated	
IEEE Authorized Signature	
Print Name	
Title	

The Institute of Electrical and Electronics Incorporated acting through Its IEEE Sensors Council	The Institute of Electrical and Electron Engineers, Incorporated acting through Its IEEE Components, Packaging and Technology Society	ugh
Authorized Signature	Authorized Signature	
Vladimir Lumelsky Print Name	Print Name	
President	Time Name	
Title	Title	
NASA - Goddard Space Flight Center Address	Address	
Greenbelt, MD 20771 City, State, Country, Postal Code	City, State, Country, Postal Code	
+1 (301) 286 6621 Phone/Fax	Phone/Fax	
Lumelsky@ieee.org	 Email	
Email	Email	
The Institute of Electrical and Electronics Engineers, Incorporated		
IEEE Authorized Signature		
Print Name		
Title		

Authorized Signature
Vladimir Lumelsky Print Name
President Title
NASA - Goddard Space Flight Center Address
Greenbelt, MD 20771 City, State, Country, Postal Code
+1 (301) 286 6621 Phone/Fax
<u>Lumelsky@ieee.org</u> Email
The Institute of Electrical and Electronics Engineers, Incorporated
IEEE Authorized Signature
Print Name
 Title

The Institute of Electrical and Electronics Engineers, Engineers, Incorporated acting through Its IEEE Dielectrics and Electrical Insulation Society

Print Name Title Address City, State, Country, Postal Code	
Address	
City, State, Country, Postal Code	
Phone/Fax	
Email	

Authorized Signature
Vladimir Lumelsky
Print Name
President Title
NASA - Goddard Space Flight Center Address
Greenbelt, MD 20771 City, State, Country, Postal Code
+1 (301) 286 6621 Phone/Fax
<u>Lumelsky@ieee.org</u> Email
The Institute of Electrical and Electronics Engineers, Incorporated
IEEE Authorized Signature
Print Name
 Title

The Institute of Electrical and Electronics Engineers, Engineers, Incorporated acting through Its IEEE Electromagnetic Compatibility Society

Print Name Title Address City, State, Country, Postal Code Phone/Fax Email	Authoriz	zed Signature
Address City, State, Country, Postal Code Phone/Fax	Print Na	me
City, State, Country, Postal Code Phone/Fax	Γitle	
Phone/Fax	Address	
	City, Sta	te, Country, Postal Code
Email	Phone/F	āx
	Email	

Authorized Signature
Vladimir Lumelsky Print Name
President Title
NASA - Goddard Space Flight Center Address
Greenbelt, MD 20771 City, State, Country, Postal Code
+1 (301) 286 6621 Phone/Fax
Lumelsky@ieee.org Email
The Institute of Electrical and Electronics Engineers, Incorporated
IEEE Authorized Signature
Print Name
 Title

The Institute of Electrical and Electronics Engineers, Engineers, Incorporated acting through Its IEEE Electron Devices Society

Authorized Signature	
Print Name	
Γitle	
Address	
City, State, Country, Postal Cod	de
Phone/Fax	

Authorized Signature
Vladimir Lumelsky Print Name
President Title
NASA - Goddard Space Flight Center Address
Greenbelt, MD 20771 City, State, Country, Postal Code
+1 (301) 286 6621 Phone/Fax
<u>Lumelsky@ieee.org</u> Email
The Institute of Electrical and Electronics Engineers, Incorporated
IEEE Authorized Signature
Print Name
Title

The Institute of Electrical and Electronics Engineers, Engineers, Incorporated acting through Its IEEE Engineering in Medicine and Biology Society

Phone/Fax	Authorized	l Signature	
Address City, State, Country, Postal Code Phone/Fax	Print Name	<u> </u>	
City, State, Country, Postal Code Phone/Fax	 Title		
	 Address		
Phone/Fax Email	 City, State,	Country, Pos	stal Code
Email	 Phone/Fax		
	Email		

Authorized Signature
Vladimir Lumelsky Print Name
President Title
NASA - Goddard Space Flight Center Address
Greenbelt, MD 20771 City, State, Country, Postal Code
+1 (301) 286 6621 Phone/Fax
<u>Lumelsky@ieee.org</u> Email
The Institute of Electrical and Electronics Engineers, Incorporated
IEEE Authorized Signature
Print Name
Title

The Institute of Electrical and Electronics Engineers, Engineers, Incorporated acting through Its IEEE Industrial Electronics Society

Author	ized Signature
Print N	ame
Title	
Addres	ss
 City, St	rate, Country, Postal Code
Phone,	/Fax
Email	

Authorized Signature
Vladimir Lumelsky Print Name
President Title
NASA - Goddard Space Flight Center Address
Greenbelt, MD 20771 City, State, Country, Postal Code
+1 (301) 286 6621 Phone/Fax
<u>Lumelsky@ieee.org</u> Email
The Institute of Electrical and Electronics Engineers, Incorporated
IEEE Authorized Signature
Print Name
 Title

The Institute of Electrical and Electronics Engineers, Engineers, Incorporated acting through Its IEEE Industry Applications Society

Print Name Title Address City, State, Country, Postal Code Phone/Fax Email		
Address City, State, Country, Postal Code Phone/Fax	Print N	ame
City, State, Country, Postal Code Phone/Fax	Title	
Phone/Fax	Addres	s
	City, St	ate, Country, Postal Code
Email	Phone/	· Fax
	Email	

Authorized Signature
Vladimir Lumelsky Print Name
President Title
NASA - Goddard Space Flight Center Address
Greenbelt, MD 20771 City, State, Country, Postal Code
+1 (301) 286 6621 Phone/Fax
<u>Lumelsky@ieee.org</u> Email
The Institute of Electrical and Electronics Engineers, Incorporated
IEEE Authorized Signature
Print Name
 Title

The Institute of Electrical and Electronics Engineers, Engineers, Incorporated acting through Its IEEE Instrumentation and Measurement Society

Authorize	l Signatur	e
Print Nam	e	
Title		
Address		
City, State	. Country,	Postal Code
Phone/Fax		
Email		

	_
Authorized Signature	A
Vladimir Lumelsky	
Print Name	Pr
President	_
Title	Ti
NASA - Goddard Space Flight Cente Address	
Greenbelt, MD 20771	_
City, State, Country, Postal Code	Ci
+1 (301) 286 6621	
Phone/Fax	Pł
Lumelsky@ieee.org Email	 Er
The Institute of Electrical and Elect Engineers, Incorporated	ronics
IEEE Authorized Signature	
Print Name	
Title	

The Institute of Electrical and Electronics Engineers, Engineers, Incorporated acting through Its IEEE Magnetics Society

Authorized Signature	
Print Name	
Title	
Address	
City, State, Country, Po	stal Code
Phone/Fax	
Email	

Authorized Signature
Vladimir Lumelsky Print Name
President Title
NASA - Goddard Space Flight Center Address
Greenbelt, MD 20771 City, State, Country, Postal Code
+1 (301) 286 6621 Phone/Fax
<u>Lumelsky@ieee.org</u> Email
The Institute of Electrical and Electronics Engineers, Incorporated
IEEE Authorized Signature
Print Name
 Title

The Institute of Electrical and Electronics Engineers, Engineers, Incorporated acting through Its IEEE Microwave Theory Society

Print Name Title Address
Address
City, State, Country, Postal Code
Phone/Fax
Email

Authorized Signature
Vladimir Lumelsky Print Name
President Title
NASA - Goddard Space Flight Center Address
Greenbelt, MD 20771 City, State, Country, Postal Code
+1 (301) 286 6621 Phone/Fax
<u>Lumelsky@ieee.org</u> Email
The Institute of Electrical and Electronics Engineers, Incorporated
IEEE Authorized Signature
Print Name
 Title

The Institute of Electrical and Electronics Engineers, Engineers, Incorporated acting through Its IEEE Nuclear and Plasma Sciences Society

Authorized Signature	
Print Name	
Title	
Address	
City, State, Country, Postal Coo	de
Phone/Fax	
Email	

Authorized Signature
Vladimir Lumelsky Print Name
President Title
NASA - Goddard Space Flight Center Address
Greenbelt, MD 20771 City, State, Country, Postal Code
+1 (301) 286 6621 Phone/Fax
Lumelsky@ieee.org Email
The Institute of Electrical and Electronics Engineers, Incorporated
IEEE Authorized Signature
Print Name
 Title

The Institute of Electrical and Electronics Engineers, Engineers, Incorporated acting through Its IEEE Oceanic Engineering Society

Print Name	
Title	
Address	
City, State, Country, Postal Co	de
Phone/Fax	
Email	

Authorized Signature
Vladimir Lumelsky Print Name
President Title
NASA - Goddard Space Flight Center Address
Greenbelt, MD 20771 City, State, Country, Postal Code
+1 (301) 286 6621 Phone/Fax
<u>Lumelsky@ieee.org</u> Email
The Institute of Electrical and Electronics Engineers, Incorporated
IEEE Authorized Signature
Print Name
 Title

The Institute of Electrical and Electronics Engineers, Engineers, Incorporated acting through Its IEEE Photonics Society

Authorized Signature Print Name Title Address City, State, Country, Postal Code Phone/Fax Email	Print Name Title Address City, State, Country, Postal Code
Title Address City, State, Country, Postal Code Phone/Fax	Title Address City, State, Country, Postal Code
Address City, State, Country, Postal Code Phone/Fax	Address City, State, Country, Postal Code
City, State, Country, Postal Code Phone/Fax	City, State, Country, Postal Code
Phone/Fax	
	Phone/Fax
Email	
Linuii	 Fmail
	z.man

Authorized Signature
Vladimir Lumelsky
Print Name
President
Title
NASA - Goddard Space Flight Center Address
Greenbelt, MD 20771
City, State, Country, Postal Code
+1 (301) 286 6621
Phone/Fax
Lumelsky@ieee.org
Email
The Institute of Electrical and Electronics Engineers, Incorporated
IEEE Authorized Signature
Print Name
 Title

The Institute of Electrical and Electronics Engineers, Engineers, Incorporated acting through Its IEEE Ultrasonics, Ferroelectrics and Frequency Control Society

Authorized Signature	
Print Name	
Title	
Address	
City, State, Country, Postal Code	
Phone/Fax	
Email	

Incorporated acting through Engineers, Incorporated acting through **Its IEEE Sensors Council Its IEEE Power Engineering Society Authorized Signature Authorized Signature** __Vladimir Lumelsky_____ **Print Name** Print Name President_____ Title Title NASA - Goddard Space Flight Center____ Address Address Greenbelt, MD 20771 _____ City, State, Country, Postal Code City, State, Country, Postal Code +1 (301) 286 6621_____ Phone/Fax Phone/Fax Lumelsky@ieee.org **Email** Email The Institute of Electrical and Electronics **Engineers, Incorporated IEEE Authorized Signature** Print Name Title

The Institute of Electrical and Electronics Engineers,

The Institute of Electrical and Electronics

Authorized Signature
Vladimir Lumelsky Print Name
President Title
NASA - Goddard Space Flight Center Address
Greenbelt, MD 20771 City, State, Country, Postal Code
+1 (301) 286 6621 Phone/Fax
<u>Lumelsky@ieee.org</u> Email
The Institute of Electrical and Electronics Engineers, Incorporated
IEEE Authorized Signature
Print Name
 Title

The Institute of Electrical and Electronics Engineers, Engineers, Incorporated acting through Its IEEE Robotics and Automation Society

Authorized Signature	
Print Name	
Γitle	
Address	
City, State, Country, Postal Coc	 le
Phone/Fax	
Email	

Authorized Signature
Vladimir Lumelsky
Print Name
President Title
NASA - Goddard Space Flight Center Address
Greenbelt, MD 20771 City, State, Country, Postal Code
+1 (301) 286 6621 Phone/Fax
<u>Lumelsky@ieee.org</u> Email
The Institute of Electrical and Electronics Engineers, Incorporated
IEEE Authorized Signature
Print Name
Title

The Institute of Electrical and Electronics Engineers, Engineers, Incorporated acting through Its IEEE Signal Processing Society

Authoria	zed Signature
Print Na	me
Title	
Address	
City, Sta	te, Country, Postal Code
Phone/f	-ax
Email	

Authorized Signature
Vladimir Lumelsky
Print Name
President Title
NASA - Goddard Space Flight Center Address
Greenbelt, MD 20771
City, State, Country, Postal Code
+1 (301) 286 6621 Phone/Fax
<u>Lumelsky@ieee.org</u> Email
The Institute of Electrical and Electronics Engineers, Incorporated
IEEE Authorized Signature
Print Name
 Title

The Institute of Electrical and Electronics Engineers, Engineers, Incorporated acting through Its IEEE Solid State Circuits Society

Authoriz	ed Signature
Print Nar	ne
Title	
Address	
	e, Country, Postal Code
Phone/Fa	эх

Authorized Signature			
Vladimir Lumelsky Print Name			
President Title			
NASA - Goddard Space Flight Center Address			
Greenbelt, MD 20771 City, State, Country, Postal Code			
+1 (301) 286 6621 Phone/Fax			
<u>Lumelsky@ieee.org</u> Email			
IEEE Authorized Signature			
Print Name			
 Title			

The Institute of Electrical and Electronics Engineers, Engineers, Incorporated acting through Its IEEE Vehicular Technology Society

Authorize	ed Signature	
Print Nam	ne	
Title		
Address		
 City, State	e, Country, Postal Code	 e
Phone/Fa	x	
Email		