



International Astronautical Federation (IAF) Technical Committee on Near Earth Objects (NEOs)



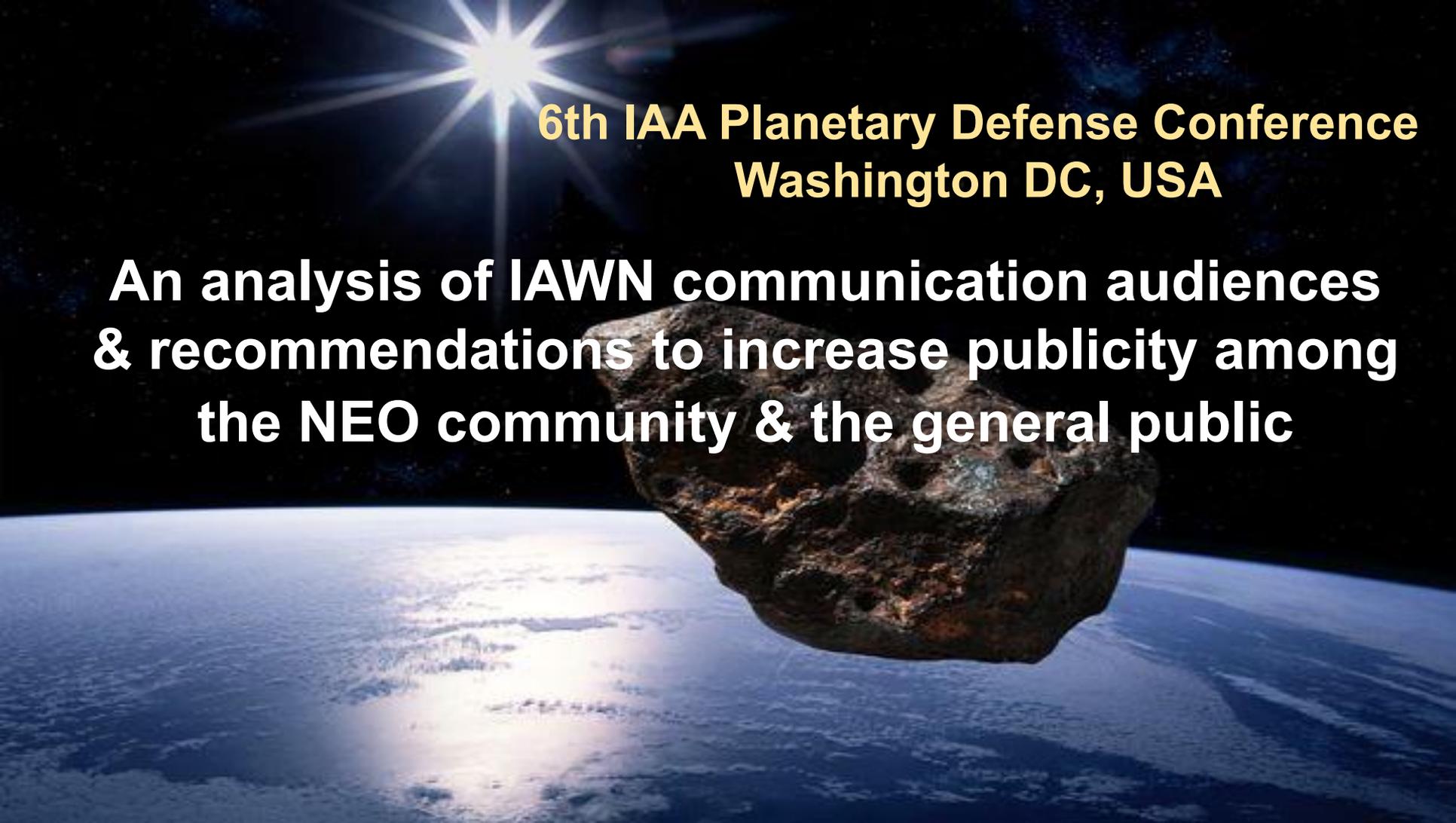
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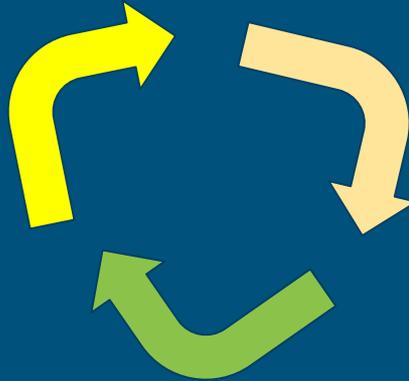


**6th IAA Planetary Defense Conference
Washington DC, USA**

**An analysis of IAWN communication audiences
& recommendations to increase publicity among
the NEO community & the general public**

This paper focuses on two aspects:

- 1) Communication between IAWN, **decision makers** and **NEO community**
- 2) **Outreach & Publicity**



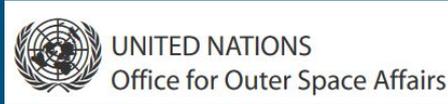
Background



IAWN was established to create an international group of organizations involved in detecting, tracking, and characterizing NEOs. The IAWN is tasked with developing a strategy using well-defined communication plans and protocols to assist Governments in the analysis of asteroid impact consequences and in the planning of mitigation responses.



The primary purpose of the **SMPAG** is to prepare for an international response to a NEO threat through the exchange of information, development of options for collaborative research and mission opportunities, and to conduct NEO threat mitigation planning activities.

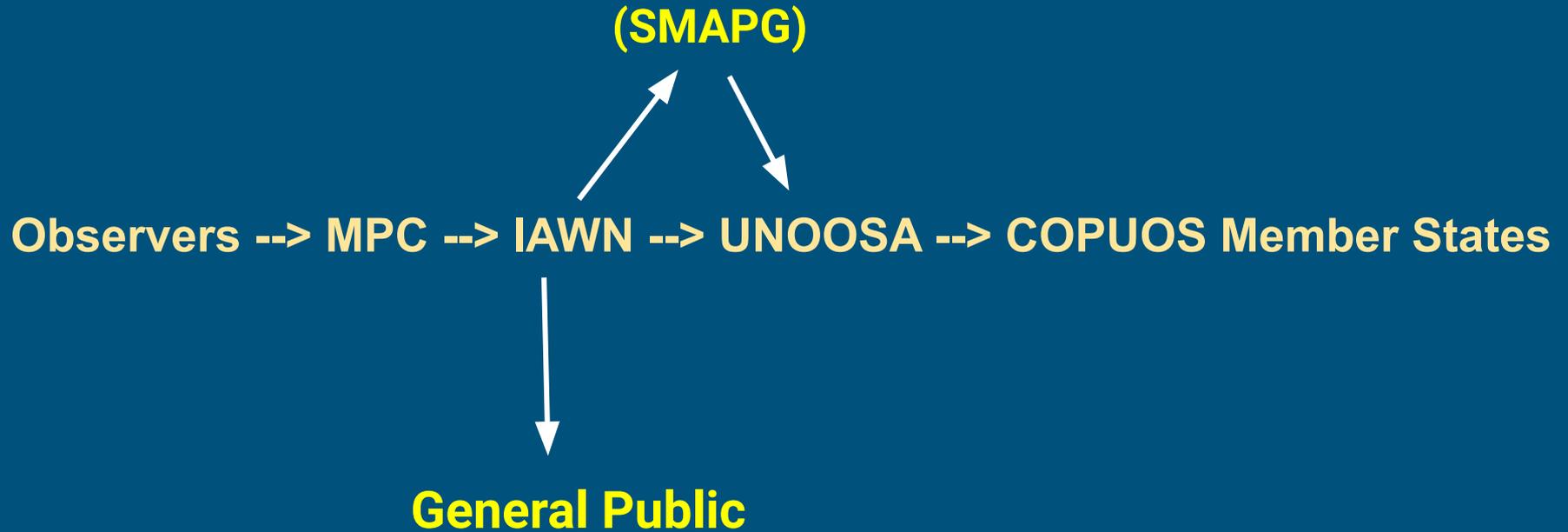


The United Nations Office for Outer Space Affairs (**UNOOSA**) is the Secretariat to **COPUOS** and works with Member States and international organizations to increase their efforts in order to fortify their cooperation in space activities. UNOOSA also acts as secretariat to SMPAG and works with both IAWN and SMPAG in addressing this global issue.

Current Status

In 2018 SMPAG and IAWN finalized the criteria and thresholds for action and suggested 3 levels of alerts depending on object size, impact probability, and impact timeframe as part of workplan items 5.1 and 5.6 Communication Guidelines

Chain of Communication



More work is needed

1) 2014 IAWN Communications Workshop Recommendations

Implemented:

- Creation of website (www.iawn.net)

Ongoing:

- Improve NEO communication within the mass media community

Pending:

- establishment of a 5 year plan and midterm actions for becoming the global trusted and credible source of NEO information, notification and warning
- employment of a full time communications officer to oversee the development of the 5 year plan.

More work is needed

2) UNOOSA has a scope to define a more concrete cooperation with IAWN in areas of:

- a) Communication (General public)**
- b) Dissemination of NEO-related information (early warning) to Member States**
- c) Capacity-building activities (through UN-SPIDER network)**

IAWN audiences and their communication needs

- The NEO community needs to be informed by IAWN if further action is needed as they can contribute to further input related to observation, characterization, modeling, deflection, etc. in order to provide additional information to the other audiences.
- The general public needs basic information to place the situation into context. The general public has vastly different backgrounds and interests and the media will play an important role in disseminating the information.
- Emergency managers want to know the best and worst case scenario in terms of effects on the ground they are familiar with so they can prepare for the worst and hope for the best.
- Decision makers need to understand what consequences their decisions would have, from doing nothing to following different options, their risks and outcomes.

Lessons learned from other branches of risk communication

Communicating with the public is a social science - predicting an asteroid impact is easier than to predict the response of the public. Communication is a two way street where matters of concern become as important as matters of fact. It is clear that the general public requires a different communication approach than decision makers.

Lessons learned from other branches of risk communication, e.g. induced seismicity due to fracking in the Netherlands shows that transparency is not enough. What is needed is science outreach that explains the data using language the public can understand. In the event of a predicted asteroid impact with a risk corridor that potentially can span over many countries and continents, cross-cultural communication aspects become vital.

IAWN and the NEO community empower policy makers as in the end it is the decision makers who make the decisions not the scientists.

This Presentation Aims to Provide Further Considerations and Recommendations for Future Communication Strategies

Recommendation to establish

IAWN ad-hoc working group on communication (WGC)



The ad-hoc working group should be composed of several professionals of different backgrounds, industries, organizations and geographic regions that propose recommendations to the IAWN steering committee and to the COPUOS member states where applicable.

Suggested WGC activities for decision makers Globally

- **Implementation of a Cross-Cultural Communication strategy:** A protocol to implement a two way Cross-cultural communication that includes, culture, language and translation specific to different regions and countries.
- We suggest to establish regional competence centers (potentially via UN-SPIDER) to have regional cultural experts available who can communicate to the local audiences.
- Points of contact between the IAWN WGC and Regional Centers should be established to review the information coming in and going out from the centers making sure the cross-cultural communication is clearly understood by both sides as well as to provide a contact for follow-up questions.
- IAWN WGC could provide training materials and hold workshops to educate the regional communication specialists.

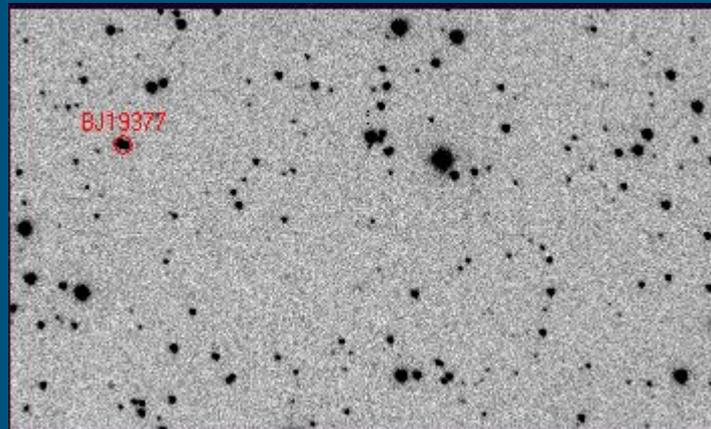
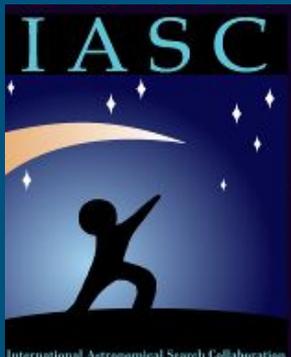
Suggested WGC activities for general public

- Improve NEO education within the international mass media community. Work with the media to establish which information is needed.
- Involving national and local NEO community and the general public in asteroid search and naming campaigns.
- Outreach initiatives aimed at specific demographics to increase the participation of Young Professionals and women
- The establishment of an international database for NEO related events, these can be educational, outreach or scientific in nature. The idea is to establish a way to bring the international NEO community and the general public together and to keep them connected by providing a searchable database of NEO related events by date and location.

Search Campaigns



- Engage the general public
- Involve local NEO community
- Increase awareness and publicity
- Create interest to join IAWN as signatory



Naming Campaigns



Within the 7 week campaign in which entries were accepted, over 1532 entries from 85 countries were received



Minor Planet Discoverers

The following table lists the total number of discoveries made by individual observers, the number of co-discoveries (given only for individual observers), the number of discoveries counted separately.

This list was last updated on 2018 Oct. 29.

Rank	Discoveries (Co)	Between	Name (s)
1	149099	1997-2012	LINEAR
2	146555	1985-2016	Spacewatch
3	62535	2004-2016	Mt. Lemmon Survey
4	41239	1995-2007	NEAT
5	27633	1998-2016	CSS
6	22332	1998-2008	LONEOS
7	6395	2009-2016	Pan-STARRS 1
8	4637	1960-1977	C. J. van Houten,
9	4096	2010-2015	WISE
10	3760	107 1986-2002	E. W. Elst

- Engage the general public
- Involve local NEO community
- High media interest
- Increase awareness and publicity
- Create interest to join IAWN as signatory



Conclusion

Since the establishment of IAWN progress has been made, however more work needs to be done in terms of two way communication among the NEO community, **the decision makers** and the general public.

Establishing an ad-hoc working group on communications would be the most efficient way to do so.

Implementing a cross-cultural strategy and to establish competence centers is a key factor for communicating on a global level.

Opportunities and resources exist to organize national asteroid search and naming campaigns that not only engage the public but also can get the local NEO community involved and will highlight IAWN as trusted source on NEOs.

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